NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT

Preliminary Findings Regarding the Renewal of a
Part 70 Operating Permit

for FCA US LLC - Kokomo Casting Plant in Howard County

Part 70 Operating Permit Renewal No.: T067-41599-00065

The Indiana Department of Environmental Management (IDEM) has received an application from FCA US LLC - Kokomo Casting Plant located at 1001 East Boulevard, Kokomo, IN 46904 for a renewal of its Part 70 Operating Permit issued on March 27, 2015. If approved by IDEM’s Office of Air Quality (OAQ), this proposed renewal would allow FCA US LLC - Kokomo Casting Plant to continue to operate its existing source.

This draft permit does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow for these changes.

A copy of the permit application and IDEM’s preliminary findings are available at:

Howard County Public Library
220 North Union Street
Howard, IN 46901

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

A copy of the preliminary findings is also available via IDEM's Virtual File Cabinet (VFC.) Please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

How can you participate in this process?

The date that this notice is posted on IDEM's website (https://www.in.gov/idem/5474.htm) marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the air pollution impact of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.
Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM’s mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number T067-41599-00065 in all correspondence.

Comments should be sent to:

Deena Levering
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for Deena Levering or (317) 234-5400
Or dial directly: (317) 234-5400
Fax: (317) 232-6749 att: Deena Levering
E-mail: cleverin@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens’ Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM’s response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM’s decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Deena Levering of my staff at the above address.

[Signature]
Heath Hartley, Section Chief
Permits Branch
Office of Air Quality
FCA US LLC - Kokomo Casting Plant
1001 East Boulevard
Kokomo, Indiana 46904

(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.
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Attachment A: 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion
Engines
SECTION A  SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary aluminum die casting plant.

Source Address: 1001 East Boulevard, Kokomo, Indiana 46904
General Source Phone Number: (248) 512-1104
SIC Code: 3363 (Aluminum Die Castings)
County Location: Howard
Source Location Status: Attainment for all criteria pollutants
Source Status: Part 70 Operating Permit Program
Major Source, under PSD Rules
Minor Source, Section 112 of the Clean Air Act
Nested Source with fossil fuel fired boilers totaling more than two hundred fifty million (250,000,000) British thermal units per hour heat input, as 1 of 28 Source Categories, within a non-listed source

A.2  Part 70 Source Definition [326 IAC 2-7-1(22)]

This source consists of two (2) plants:

(a)  FCA US LLC - Kokomo Casting Plant (KCP) (Source ID 067-00065) is located at 1001 East Boulevard, Kokomo, Indiana 46904. This plant is a stationary aluminum die cast plant (SIC Code 3363).

(b)  FCA US LLC - Kokomo Transmission Plant (KTP) (Source ID 067-00078) is located at 2401 S. Reed Road, Kokomo, Indiana 46904. This plant consists of machining, cleaning, and heat treating facilities to produce transmissions for use in automobiles and light duty trucks (SIC Code 3714).

These plants are considered a single source, but operate under different source IDs and separate Part 70 Operating Permits for administrative purposes.

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

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

(a)  One (1) natural gas-fired aluminum stack melting furnace, identified as SM3, constructed in 2008, with a maximum melt/remelt capacity of four and four tenths (4.4) tons per hour, with a maximum heat input capacity of 10.93 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 3SM.

(b)  One (1) natural gas-fired aluminum stack melting furnace, identified as SM5, constructed in 2008, reconstructed in 2017, with a maximum melt/remelt capacity of four and four tenths (4.4) tons per hour, with a maximum heat input capacity of 10.93 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 5SM.
(c) One (1) natural gas-fired aluminum reverberatory furnace, identified as 2RF, constructed in 1984, with a maximum remelt capacity of 6.5 tons per hour, with a maximum flux usage of 100 pounds per day, with a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled, and exhausting to stacks 2RF and 2RCW.

(d) One (1) natural gas-fired aluminum reverberatory furnace, identified as 4RF, constructed in 1998, with a maximum remelt capacity of 6.5 tons of scrap metal per hour, with a maximum flux usage of 100 pounds per day, with a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled, and exhausting to stacks 4RF and 4RCW.

(e) One (1) natural gas-fired aluminum reverberatory furnace, identified as 6RF, constructed in 1983, with a maximum remelt capacity of 6.5 tons per hour, with a maximum flux usage of 100 pounds per day, with a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled, and exhausting to stacks 6RF and 5RCW.

(f) One (1) natural gas-fired aluminum reverberatory furnace, identified as 7RF, constructed in 1995, with no remelt capability and a maximum average throughput of ten (10) tons per hour and a maximum flux capacity of 82.2 pounds per day (combined with furnace 8RF), with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 7RF.

(g) One (1) natural gas-fired aluminum reverberatory furnace, identified as 8RF, constructed in 1995, with no remelt capability and a maximum average throughput of ten (10) tons per hour and a maximum flux capacity of 82.2 pounds per day (combined with furnace 7RF), with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 8RF.

(h) One (1) natural gas-fired aluminum reverberatory furnace, identified as 9RF, constructed in 1998, with no remelt capability and a maximum average throughput of ten (10) tons per hour and a maximum flux capacity of 115 pounds per day (combined with furnace 10RF), with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 9RF.

(i) One (1) natural gas-fired aluminum reverberatory furnace, identified as 10RF, constructed in 1998, with no remelt capability and a maximum average throughput of ten (10) tons per hour and a maximum flux capacity of 115 pounds per day (combined with furnace 9RF), with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 10RF.

(j) One (1) Tumbleblast shotblast machine, identified as DC5, constructed in 2000, with a maximum shotblast rate of 40,000 pounds per hour (20 tons per hour), and with emissions controlled by cartridge filter.

(k) One (1) Wire Mesh machine used for deburring of parts, identified as DC7, constructed in 2005, with a maximum shotblast rate of 174,760 pounds per hour (87.38 tons per hour), and with emissions controlled by a cartridge filter, and exhausting to a stack.

(l) One (1) Wire Mesh machine used for deburring of parts, identified as DC8, constructed in 2005, with a maximum shotblast rate of 174,760 pounds per hour (87.38 tons per hour), with emissions controlled by a cartridge filter approved for modification in 2012, and exhausting to Stack DC8.

(m) One (1) Wheelabrator rotary shotblast unit, identified as DC-10, permitted in 2013, with a
maximum shotblast rate of 135,000 pounds per hour, and with particulate emissions
controlled by cartridge filters, and exhausting to a stack.

A.4 Specifically Regulated Insignificant Activities

This stationary source does not currently have any insignificant activities, as defined in
326 IAC 2-7-1(21) that have applicable requirements.

(a) Die casting machines, identified as DCAST1, with emissions uncontrolled and exhausting internally.

(b) Trim machines, for removing gates, runners, flash and other large pieces of excess aluminum from the die casting process, with no emissions.

(c) Machining where an aqueous cutting coolant continuously floods the machining interface.

(d) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment.

(e) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.

(f) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; woodworking operations, tooling operations including dry grinding/sanding/cutting stations wet grinding stations using a maximum of 0.09 gallons of cutting oil per hour, with emissions controlled by a baghouse and exhausting internally.

(g) One (1) diesel fired emergency generator, identified as 450R071, installed in 1989, with a site rating of 900 HP.

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

(h) Seven (7) dry deburring systems, identified as Dry Deburr 1 - 7, permitted in 2013, each with one (1) station for handling parts, one (1) station for drilling and tapping parts, and four (4) stations for processing parts through milling and brushing heads, with emissions uncontrolled, and exhausting within the plant.

(i) Waste water treatment plant operations, with a maximum treatment capacity of 150,000 gallons per day, with emissions uncontrolled.

(j) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, including:

1. Three (3) natural gas fired heat treat furnaces, permitted in 2010, each with a maximum heat input capacity of 0.8 MMBtu/hr.

2. One (1) natural gas fired heat treat furnace, installed in 2011, with a maximum heat input capacity of 0.8 MMBtu/hr.

3. Twenty-six (26) natural gas fired air make-up units, with a total heat input capacity of 74.4 MMBtu/hr.
(k) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu per hour.

Note: These units are portable generators and engines that are considered nonroad engines. Therefore, the potential to emit of these units are not counted toward the permit level determination and these units are not subject to 40 CFR 60, Subpart IIII, 40 CFR 60, Subpart JJJJ, or 40 CFR 63, Subpart ZZZZ.

(l) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(m) Refractory storage not requiring air pollution control equipment.

(n) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.

(o) Cleaners and solvents characterized as follows:

1. having a vapor pressure equal to or less than 2 kilopascals; 15 mm Hg; or 0.3 psi measured at 38 C (100 F); or

2. having a vapor pressure equal to or less than 0.7 kilopascal; 5 mm Hg; or 0.1 psi measured at 20 C (68 F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months;

Note: All cold cleaners use aqueous based products with VOC contents of zero.

(p) Closed loop heating and cooling systems.

(q) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(r) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.

(s) Noncontact cooling tower systems with natural draft cooling towers not regulated under a NESHAP.

(t) Noncontact cooling tower systems with forced and induced draft cooling tower systems not regulated under a NESHAP.

(u) Quenching operations used with heat treating processes.

(v) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(w) Heat exchanger cleaning and repair.

(x) Paved and unpaved roads and parking lots with public access.

(y) Asbestos abatement projects regulated by 326 IAC 14-10.

(z) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
(aa) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(bb) A laboratory as defined in 326 IAC 2-7-1(21)(D).

(cc) RWD Deburring units, used to trim large pieces of metal from parts, resulting in no PM emissions.

(dd) Six (6) enclosed Haas Deburring Units, used to trim large pieces of metal from parts, resulting in no PM emissions.

A.5 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, T067-41599-00065, 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. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

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

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

(a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:
it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and

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

(b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) A "responsible official" is defined at 326 IAC 2-7-1(35).

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

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

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

and

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

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

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

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

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

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

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.
The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

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

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

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

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

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

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

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

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

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

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

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

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

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

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

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

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

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

(A) A description of the emergency;

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

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

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

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

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

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.

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

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

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

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

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

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

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

1. The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
2. The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
3. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
4. The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

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

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

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

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

(a) All terms and conditions of permits established prior to T067-41599-00065 and issued pursuant to permitting programs approved into the state implementation plan have been either:

1. incorporated as originally stated,
2. revised under 326 IAC 2-7-10.5, or
3. deleted under 326 IAC 2-7-10.5.

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

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

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

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

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit.
The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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)]

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)]

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)]

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

Request for renewal shall be submitted to:
Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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.

If the Permittee submits a timely and complete application for renewal of this permit, the source’s failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the
deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]
(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
(b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]
(a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]
(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) or (c) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;
(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
(4) The Permittee notifies the:
Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region 5
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

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

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

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

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

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

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

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

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating
scenarios that are described in the terms and conditions of this permit in accordance with
326 IAC 2-7-5(9). No prior notification of IDEM, OAQ or U.S. EPA is required.
(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]
A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]
Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee’s right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

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

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

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

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

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

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

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

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

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

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]

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

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

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

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

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

Entire Source

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

C.1 Opacity  [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

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

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

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

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

C.5 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 by using ambient air quality modeling pursuant to 326 IAC 1-7-4. 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.6 Asbestos Abatement Projects  [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

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

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

2. If there is a change in the following:
   - (A) Asbestos removal or demolition start date;
   - (B) Removal or demolition contractor; or
   - (C) Waste disposal site.

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

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

All required notifications shall be submitted to:

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

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

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

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

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.
Testing Requirements [326 IAC 2-7-6(1)]

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

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

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

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

(a) For new units: Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

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

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

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

(c) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(d) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

C.10 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. The analog instrument shall be capable of measuring values outside of the normal range.

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

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

C.11 Emergency Reduction Plans [326 IAC 2-5-2] [326 IAC 2-5-3]

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

(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 2-5-3]

C.12 Risk Management Plan [326 IAC 2-7-5(11)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.
C.13 Response to Excursions or Exceedances [40 CFR 64] [326 IAC 3-8] [326 IAC 2-7-5] [326 IAC 2-7-6]

(I) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable response steps taken.

(II) CAM Response to excursions or exceedances.

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

(b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a Quality Improvement Plan (QIP). The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).

e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:

(1) Failed to address the cause of the control device performance problems; or

(2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(h) CAM recordkeeping requirements.

(1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(c) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or
records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee’s obligations with regard to the records required by this condition.

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

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

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(35).

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

C.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

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

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

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(33) (“Regulated pollutant, which is used only for purposes of Section 19 of this rule”) from the source, for purpose of fee assessment.

The statement must be submitted to:

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

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(35).
C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

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

- (AA) All calibration and maintenance records.
- (BB) All original strip chart recordings for continuous monitoring instrumentation.
- (CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following, where applicable:

- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
- (BB) The dates analyses were performed.
- (CC) The company or entity that performed the analyses.
- (DD) The analytical techniques or methods used.
- (EE) The results of such analyses.
- (FF) The operating conditions as existing at the time of sampling or measurement.

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

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

(c) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, document and maintain the following records:

- (A) A description of the project.
- (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
- (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
  
  (i) Baseline actual emissions;
  
  (ii) Projected actual emissions;
(iii) Amount of emissions excluded under section 326 IAC 2-2-1(pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2][326 IAC 2-3][40 CFR 64][326 IAC 3-8]

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

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

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

(1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

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

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

(b) The address for report submittal is:

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

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

(e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C - General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (ww) and/or 326 IAC 2-3-1 (pp), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).

(f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

(g) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

**Stratospheric Ozone Protection**

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.
SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) natural gas-fired aluminum stack melting furnace, identified as SM3, constructed in 2008, with a maximum melt/remelt capacity of four and four tenths (4.4) tons per hour, with a maximum heat input capacity of 10.93 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 3SM.

(b) One (1) natural gas-fired aluminum stack melting furnace, identified as SM5, constructed in 2008, reconstructed in 2017, with a maximum melt/remelt capacity of four and four tenths (4.4) tons per hour, with a maximum heat input capacity of 10.93 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 5SM.

(c) One (1) natural gas-fired aluminum reverberatory furnace, identified as 2RF, constructed in 1984, with a maximum remelt capacity of 6.5 tons per hour, with a maximum flux usage of 100 pounds per day, with a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled, and exhausting to stacks 2RF and 2RCW.

(d) One (1) natural gas-fired aluminum reverberatory furnace, identified as 4RF, constructed in 1998, with a maximum remelt capacity of 6.5 tons of scrap metal per hour, with a maximum flux usage of 100 pounds per day, with a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled, and exhausting to stacks 4RF and 4RCW.

(e) One (1) natural gas-fired aluminum reverberatory furnace, identified as 6RF, constructed in 1983, with a maximum remelt capacity of 6.5 tons per hour, with a maximum flux usage of 100 pounds per day, with a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled, and exhausting to stacks 6RF and 5RCW.

(f) One (1) natural gas-fired aluminum reverberatory furnace, identified as 7RF, constructed in 1995, with no remelt capability and a maximum average throughput of ten (10) tons per hour and a maximum flux capacity of 82.2 pounds per day (combined with furnace 8RF), with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 7RF.

(g) One (1) natural gas-fired aluminum reverberatory furnace, identified as 8RF, constructed in 1995, with no remelt capability and a maximum average throughput of ten (10) tons per hour and a maximum flux capacity of 82.2 pounds per day (combined with furnace 7RF), with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 8RF.

(h) One (1) natural gas-fired aluminum reverberatory furnace, identified as 10RF, constructed in 1998, with no remelt capability and a maximum average throughput of ten (10) tons per hour and a maximum flux capacity of 115 pounds per day (combined with furnace 10RF), with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 9RF.

(i) One (1) natural gas-fired aluminum reverberatory furnace, identified as 10RF, constructed in 1998, with no remelt capability and a maximum average throughput of ten (10) tons per hour and a maximum flux capacity of 115 pounds per day (combined with furnace 10RF), with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 9RF.
with furnace 9RF), with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 10RF.

(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 Limits [326 IAC 2-2]

(a) In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1195 Modification permitted under Registered Construction and Operation Status Permit No. 067-4453-00002, the Permittee shall comply with the following:

(1) The total annual flux usage to the Reverberatory Furnaces, identified as 7RF and 8RF, shall be less than 30,000 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month.

(2) During fluxing operations, the total PM emissions due to flux usage from the Reverberatory Furnaces, identified as 7RF and 8RF, shall be less than 0.9 lb of PM/lb of flux.

(3) During fluxing operations, the total PM10 emissions due to flux usage from the Reverberatory Furnaces, identified as 7RF and 8RF, shall be less than 0.45 lb of PM10/lb of flux.

Compliance with these limits, shall limit the potential to emit of PM and PM10 to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1995 Modification permitted under Registered Construction and Operation Status Permit No. 067-4453-00002.

(b) In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1998 Modification permitted under Registered Construction and Operation Status Permit No. 067-9188-00002, the Permittee shall comply with the following:

(1) The total annual flux usage to the Reverberatory Furnaces, identified as 9RF and 10RF, shall be less than 41,975 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month.

(2) During fluxing operations, the total PM emissions due to flux usage from the Reverberatory Furnaces, identified as 9RF and 10RF, shall be less than 0.9 lb of PM/lb of flux.

(3) During fluxing operations, the total PM10 emissions due to flux usage from the Reverberatory Furnaces, identified as 9RF and 10RF, shall be less than 0.45 lb of PM10/lb of flux.

Compliance with these limits, shall limit the potential to emit of PM and PM10 to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1998 Modification permitted under Registered Construction and Operation Status Permit No. 067-9188-00002.
In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

1. The total metal melted/remelted to the two (2) furnaces, identified as SM3 and 4RF, shall be less than 50,000 tons per twelve (12) consecutive month period, with compliance determined at the end of the month.

2. The total PM, PM10, and PM2.5 emissions from the two (2) furnaces, identified as SM3 and 4RF, shall be less than the following:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM (lb/ton of melting or remelting)</th>
<th>PM10 (lb/ton of melting or remelting)</th>
<th>PM2.5 (lb/ton of melting or remelting)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM3</td>
<td>0.525</td>
<td>0.525</td>
<td>0.45</td>
</tr>
<tr>
<td>4RF</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. The combined annual flux usage to the two (2) furnaces, identified as SM3 and 4RF, shall be less than 14,000 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month.

4. During fluxing operations, the total PM, PM10, and PM2.5 emissions from the two (2) furnaces, identified as SM3 and 4RF, shall be less than the following:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM (lb/lb of flux)</th>
<th>PM10 (lb/lb of flux)</th>
<th>PM2.5 (lb/lb of flux)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM3</td>
<td>0.129</td>
<td>0.129</td>
<td>0.11</td>
</tr>
<tr>
<td>4RF</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. The total metal melted/remelted to the two (2) furnaces, identified as SM5 and 6RF, shall be less than 54,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

6. The total PM, PM10, and PM2.5 emissions from the two (2) furnaces, identified as SM5 and 6RF, shall be less than the following:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM (lb/ton of melting or remelting)</th>
<th>PM10 (lb/ton of melting or remelting)</th>
<th>PM2.5 (lb/ton of melting or remelting)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM5</td>
<td>0.525</td>
<td>0.525</td>
<td>0.45</td>
</tr>
<tr>
<td>6RF</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. The combined annual flux usage to the two (2) furnaces, identified as SM5 and 6RF, shall be less than 14,000 pounds per twelve (12) consecutive month period with compliance determined at the end of the month.

8. During fluxing operations, the total PM, PM10, and PM2.5 emissions from the two (2) furnaces, identified as SM5 and 6RF, shall be less than the following:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM (lb/lb of flux)</th>
<th>PM10 (lb/lb of flux)</th>
<th>PM2.5 (lb/lb of flux)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM5</td>
<td>0.129</td>
<td>0.129</td>
<td>0.11</td>
</tr>
<tr>
<td>6RF</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compliance with these limits, combined with the PM, PM10, PM2.5, limits in Conditions D.1.1(a), D.1.1(b), and D.2.1, shall limit the potential to emit from SM3, 4RF, SM5 and
6RF of PM to less than twenty-five (25) tons per twelve (12) consecutive month period, PM10 to less than fifteen (15) tons per twelve (12) consecutive month period, and PM2.5 to less than ten (10) tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-2 (PSD) not applicable.

D.1.2 Particulate Matter Emission Limitation and Nonattainment NSR [326 IAC 6.5-5-2]

Pursuant to 326 IAC 6.5-5-2, the Permittee shall comply with the following:

(a) The particulate matter (PM) emissions from the furnace, identified as 2RF, shall not exceed 0.85 grains per dry standard cubic foot and 92.5 tons per year.

(b) The particulate matter (PM) emissions from the furnace, identified as 6RF, shall not exceed 0.63 grains per dry standard cubic foot and 36.2 tons per year.

Compliance with these limits shall also limit the potential to emit from furnaces 2RF and 6RF to less than 100 tons of PM per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the 1983 and 1984 modifications.

D.1.3 Hazardous Air Pollutant (HAP) Minor Limit [40 CFR 63]

In order to render the source an area source of HAP emissions under Section 112 of the Clean Air Act (CAA), the Permittee shall comply with the following:

(a) The metallic HAP content of the metals introduced into the stack melting and reverberatory furnaces, identified as SM3, SM5, and 2RF, 4RF, 6RF, through 10RF, shall not exceed one percent (1.0%) by weight.

(b) Particulate emissions from the stack melting and reverberatory furnaces shall not exceed the following:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM Limit</th>
<th>PM Limit Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM3 and 4RF</td>
<td>0.525</td>
<td>lb per ton of melting or remelting</td>
</tr>
<tr>
<td>6RF and SM5</td>
<td>0.525</td>
<td>lb per ton of melting or remelting</td>
</tr>
<tr>
<td>2RF</td>
<td>0.391</td>
<td>lb per ton of melting or remelting</td>
</tr>
<tr>
<td>7RF and 8RF</td>
<td>0.129</td>
<td>lb per lb of flux</td>
</tr>
<tr>
<td>9RF and 10RF</td>
<td>0.129</td>
<td>lb per lb of flux</td>
</tr>
</tbody>
</table>

Compliance with these limits, combined with the potential to emit HAP from all other emission units at the source, shall limit the source-wide potential to emit single HAP to less than 10 tons per twelve (12) consecutive month period and the source-wide potential to emit total HAPs to less than 25 tons per twelve (12) consecutive month period, and shall render the source an area source of HAP emissions under Section 112 of the Clean Air Act (CAA).

D.1.4 Particulate Matter Emission Limitations [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a), the particulate matter emissions from the furnaces, identified as SM3, SM5, 4RF, 7RF, 8RF, 9RF and 10RF shall not exceed 0.03 grains per dry standard cubic foot, each.

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee’s obligation with regard to the preventive maintenance plan required by this condition.
D.1.6 Material Usage [40 CFR 63, Subpart RRR][326 IAC 2-2]

The Permittee shall melt only clean charge, customer returns, or internal scrap, as defined under 40 CFR 63.1503, in the reverberatory furnaces, identified as 2RF, 4RF, 6RF, 7RF, 8RF, 9RF, and 10RF, and two (2) stack melt furnaces, identified as SM3 and SM5. Compliance with the above Condition renders the provisions of 40 CFR 63, Subpart RRR and 326 IAC 2-2-1(ff)(1)(T), not applicable to the source.

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

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

(a) In order to demonstrate compliance with Condition D.1.2, the Permittee shall perform PM testing of the Reverberatory Furnaces 2RF or 6RF utilizing methods as approved by the Commissioner at least once every 5 years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition. Testing shall alternate between 2RF and 6RF for each test cycle.

(b) In order to demonstrate compliance with Conditions D.1.1(c)(4), D.1.1(c)(8) and D.1.4, the Permittee shall perform PM, PM10, and PM2.5 testing on either the Stack Melting Furnace SM3 and Reverberatory Furnace 4RF or Stack Melting Furnace SM5 and Reverberatory Furnace 6RF (during fluxing operations) utilizing methods as approved by the Commissioner at least once every 5 years from the date of the most recent valid compliance demonstration, with testing alternated between SM3/4RF and SM5/6RF. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition. PM10 and PM2.5 includes filterable and condensable PM.

(c) In order to demonstrate compliance with Conditions D.1.1(c)(2), D.1.1(c)(6), and D.1.4, the Permittee shall perform PM, PM10, and PM2.5 testing of the Stack Melting Furnace SM3 and Reverberatory Furnace 4RF or Stack Melting Furnace SM5 and Reverberatory Furnace 6RF (when not conducting fluxing operation) utilizing methods as approved by the Commissioner at least once every 5 years from the date of the most recent valid compliance demonstration, with testing alternated between SM3/4RF and SM5/6RF. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition. PM10 and PM2.5 includes filterable and condensable PM. The unit tested during a testing cycle shall be the same as tested for in Condition D.1.7(c).

(d) In order to demonstrate compliance with Conditions D.1.1(a)(2), D.1.1(a)(3), D.1.1(b)(2), D.1.1(b)(3), and D.1.4, the Permittee shall perform PM and PM10 testing on one of the Reverberatory Furnaces (7RF, 8RF, 9RF, or 10RF) utilizing methods as approved by the Commissioner at least once every 5 years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition. PM10 includes filterable and condensable PM. Testing shall alternate between 7RF, 8RF, 9RF, and 10RF for each test cycle, such that testing on a furnace shall not be repeated until 7RF, 8RF, 9RF, and 10RF have each been tested.

(e) In order to demonstrate compliance with Condition D.1.3(a), the Permittee shall either:
(1) Test each pot of molten metal introduced into the stack melting/reverberatory furnaces (SM3, SM5, 2RF, 4RF, and 6RF through 10RF, to verify the individual metallic HAP and the total metallic HAP content of the molten metal of each pot, utilizing methods as approved by the Commissioner; or

(2) Provide vendor analysis of each pot of molten metal delivered that verifies the individual metallic HAP content of the molten metal of each pot. The vendor analysis shall be conducted utilizing methods as approved by the Commissioner.

(f) In order to verify the HCl emission rate from the furnaces during fluxing operations and in order to assure the source is not a major source of HAPs, the Permittee shall perform HCl testing (before controls) of one of the Stack Melting Furnaces (SM3 or SM5), or one of the Reverberatory Furnaces (2RF, 4RF, or 6RF through 10RF) to verify the HCl emission factors, utilizing methods approved by the commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition. Testing shall alternate between 7RF, 8RF, 9RF, and 10RF for each test cycle, such that testing on a furnace shall not be repeated until 7RF, 8RF, 9RF, and 10RF have each been tested.

D.1.8 Particulate Emissions [326 IAC 6.5-5-2]

(a) In order to demonstrate compliance with Condition D.1.2(a), particulate emissions from the Reverberatory Furnace, identified as 2RF, shall be determined monthly as follows:

\[2RF \text{ PM Emissions (ton/month)} = \frac{(A \times B)}{2000} + \frac{(C \times D)}{2000}\]

Where:

- \(A\) = Metal melted in 2RF (ton/month)
- \(B\) = PM emission rate during metal melting, as measured during the most recent valid stack test (lb PM / ton metal melted)
- \(C\) = Flux usage in 2RF (lb/month)
- \(D\) = PM emission rate during fluxing, 0.129 lb PM / lb flux or as measured during the most recent valid stack test
- 2000 = Conversion of 1 ton / 2000 lb

(b) In order to demonstrate compliance with Condition D.1.2(b), particulate emissions from the Reverberatory Furnace, identified as 6RF, shall be determined monthly as follows:

\[6RF \text{ PM Emissions (ton/month)} = \frac{(E \times F)}{2000} + \frac{(G \times H)}{2000}\]

Where:

- \(E\) = Metal melted in 6RF (ton/month)
- \(F\) = PM emission rate during metal melting, as measured during the most recent valid stack test (lb PM / ton metal melted)
- \(G\) = Flux usage in 6RF (lb/month)
- \(H\) = PM emission rate during fluxing, 0.129 lb PM / lb flux or as measured during the most recent valid stack test
- 2000 = Conversion of 1 ton / 2000 lb

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

D.1.9 Visible Emissions Notations

(a) Visible emission notations of the stack exhausts for (SM3, SM5, 2RF, 4RF, and 6RF
through 10RF) 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) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

D.1.10 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.1(a)(1), the Permittee shall maintain records of the total flux usage in 7RF and 8RF combined for each month.

(b) To document the compliance status with Condition D.1.1(b)(1), the Permittee shall maintain records of the total flux usage in 9RF and 10RF combined for each month.

(c) To document the compliance status with Condition D.1.1(c)(1) and D.1.1(c)(3), the Permittee shall maintain records of the total metal melted/remelted and the total flux usage in SM3 and 4RF combined for each month.

(d) To document the compliance status with Condition D.1.1(c)(5) and D.1.1(c)(7), the Permittee shall maintain records of the total metal melted/remelted and the total flux usage in SM5 and 6RF combined for each month.

(e) To document the compliance status of Conditions D.1.2 and D.1.10, the Permittee shall maintain records of monthly and twelve (12) consecutive month average particulate matter (PM) emissions from 2RF and 6RF.

(f) To document the compliance status of Condition D.1.3(a), the Permittee shall maintain records of the results of the test analyses performed by the facility or vendor as required by Condition D.1.7(g).

(g) To document the compliance status of Condition D.1.6, the Permittee shall maintain records of the type, quality, and origin of all materials melted in SM3, SM5, 2RF, 4RF, and 6RF through 10RF sufficient to demonstrate compliance with Condition D.1.6.

(h) To document the compliance status with Condition D.1.9, the Permittee shall maintain records of daily visible emission notations of the stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(i) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.
D.1.11 Reporting Requirements

(a) A summary of the information to document the compliance status with D.1.1(a)(1), D.1.1(b)(1), D.1.1(c)(1), D.1.1(c)(3), D.1.1(c)(5), D.1.1(c)(7), and D.1.2 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee’s obligation with regard to the reporting required by this condition.

(b) A summary of the information to document the compliance status with D.1.3 shall be submitted upon request. Section C - General Reporting contains the Permittee’s obligation with regard to the reporting required by this condition.

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(35).
SECTION D.2    EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(j) One (1) Tumbleblast shotblast machine, identified as DC5, constructed in 2000, with a maximum shotblast rate of 40,000 pounds per hour (20 tons per hour), and with emissions controlled by cartridge filter.

(k) One (1) Wire Mesh machine used for deburring of parts, identified as DC7, constructed in 2005, with a maximum shotblast rate of 174,760 pounds per hour (87.38 tons per hour), and with emissions controlled by a cartridge filter, and exhausting to a stack.

(l) One (1) Wire Mesh machine used for deburring of parts, identified as DC8, constructed in 2005, with a maximum shotblast rate of 174,760 pounds per hour (87.38 tons per hour), with emissions controlled by a cartridge filter approved for modification in 2012, and exhausting to Stack DC8.

(m) One (1) Wheelabrator rotary shotblast unit, identified as DC-10, permitted in 2013, with a maximum shotblast rate of 135,000 pounds per hour, and with particulate emissions controlled by cartridge filters, and exhausting to a stack.

(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 Limits [326 IAC 2-2]

(a) In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1999 Modification permitted under SSM No. 067-10648-00065, the Permittee shall comply with the following:

(1) PM emissions from the Tumbleblast shotblast, identified as DC5, shall not exceed 4.64 pounds per hour.

(2) PM10 emissions from the Tumbleblast shotblast, identified as DC5, shall not exceed 2.36 pounds per hour.

Compliance with these limits, shall limit the potential to emit of PM and PM10 to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2000 Modification permitted under SSM No. 067-10648-00065.

(b) In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2005 Modification permitted under MSM No. 067-21840-00065, the Permittee shall comply with the following:

(1) PM and PM10 emissions from DC7 and DC8 shall not exceed the limits in the table below:

<table>
<thead>
<tr>
<th>Unit</th>
<th>PM Limit (lb/hr)</th>
<th>PM10 Limit (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC7: Wire Mesh Machine</td>
<td>2.85</td>
<td>1.71</td>
</tr>
<tr>
<td>DC8: Wire Mesh Machine</td>
<td>2.85</td>
<td>1.71</td>
</tr>
</tbody>
</table>
Compliance with these limits, shall limit the potential to emit of PM and PM10 to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2005 Modification permitted under MSM No. 067-21840-00065.

(c) In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2013 Modification permitted under SSM No. 067-33120-00065, the Permittee shall comply with the following:

(1) PM, PM10, and PM2.5 emissions from the shot blast unit (DC-10) shall not exceed the limits in the table below:

<table>
<thead>
<tr>
<th>Unit</th>
<th>PM Limit (lb/hr)</th>
<th>PM10 Limit (lb/hr)</th>
<th>PM2.5 Limit (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shot Blast Unit (DC-10)</td>
<td>0.304</td>
<td>0.304</td>
<td>0.304</td>
</tr>
</tbody>
</table>

Compliance with these limits, shall limit the potential to emit of PM, PM10, and PM2.5 to less than twenty-five (25) tons of PM, fifteen (15) tons of PM10, and ten (10) tons of PM2.5 per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2013 Modification permitted under SSM No. 067-33120-00065.

D.2.2 Hazardous Air Pollutant (HAP) Minor Limit [40 CFR 63]

In order to render the source an area source of HAP emissions under Section 112 of the Clean Air Act (CAA), the Permittee shall comply with the following:

(a) The total metallic HAP content of the shot used by the shotblast machines and wire mesh machines, identified as DC5, DC7, DC8, and DC-10, shall not exceed 0.0175 pound of total metallic HAPs per pound of shot.

(b) Particulate emissions from the shotblast and wire mesh machines shall not exceed the following:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM Limit (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC5</td>
<td>4.64</td>
</tr>
<tr>
<td>DC7</td>
<td>2.85</td>
</tr>
<tr>
<td>DC8</td>
<td>2.85</td>
</tr>
<tr>
<td>DC-10</td>
<td>0.304</td>
</tr>
</tbody>
</table>

Compliance with these limits, combined with the potential to emit HAP from all other emission units at the source, shall limit the source-wide potential to emit single HAP to less than 10 tons per twelve (12) consecutive month period and the source-wide potential to emit total HAPs to less than 25 tons per twelve (12) consecutive month period, and shall render the source an area source of HAP emissions under Section 112 of the Clean Air Act (CAA).

D.2.3 Particulate Matter Emission Limitations [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2, particulate matter (PM) emissions from each of the shotblast units (DC5 and DC-10) and the wire mesh machines (DC7 and DC8) shall not exceed 0.03 grain per dry standard cubic foot (dscf).

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

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

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

**D.2.5 Particulate Control**

In order to assure compliance with Conditions D.2.1, D.2.2, and D2.3, the cartridge filters for particulate control shall be in operation and control emissions from the shotblast units (DC5 and DC-10) and the wire mesh machines (DC7 and DC8) facility at all times the respective shotblast units (DC5 and DC-10) and the wire mesh machines (DC7 and DC8) are in operation.

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

(a) In order to demonstrate compliance with Conditions D.2.1(b)(1), D.2.2, and D.2.3, the Permittee shall perform PM and PM10 testing of the wire mesh shotblast machines DC7 or DC8 utilizing methods as approved by the Commissioner at least once every 5 years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition. PM10 includes filterable and condensable PM. Testing shall alternate between DC7 and DC8 for each test cycle.

(b) In order to demonstrate compliance with Conditions D.2.1(c)(1), D.2.2, and D.2.3, the Permittee shall perform PM, PM10, and PM2.5 testing of the wheelabrator rotary shotblast unit DC-10 utilizing methods as approved by the Commissioner at least once every 5 years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition. PM10 and PM2.5 includes filterable and condensable PM.

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

**D.2.7 Visible Emissions Notations**

(a) Visible emission notations of cartridge filter for DC5 stack exhausts 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) If abnormal emissions are observed, the Permittee shall take a reasonable response.
Section C – Response to Excursions and Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.8 Visible Emissions Notations [40 CFR 64]

(a) Visible emission notations of cartridge filter for DC7, DC8, and DC-10 stack exhausts 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) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.9 Broken or Failed Bag Detection

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

(b) For a single compartment 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.2.10 Record Keeping Requirement

(a) To document the compliance status with Condition D.2.2(a), the Permittee shall maintain records of safety data sheets (SDS), or their equivalent, necessary to verify the individual metallic HAP and the total metallic HAP content of the shot used during the compliance period. Vendor supplied Technical Data Sheets or FCA US LLC HAZCON sheets, detailing the alloy composition tested value, are an acceptable equivalent.

(b) To document the compliance status with Conditions D.2.7 and D.2.8, the Permittee shall maintain records of daily visible emission notations of the baghouse(s) stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not
taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.
SECTION D.3  EMISSIONS UNIT OPERATION CONDITIONS

<table>
<thead>
<tr>
<th>Emissions Unit Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)  Die casting machines, identified as DCAST1, with emissions uncontrolled and exhausting</td>
</tr>
<tr>
<td>internally.</td>
</tr>
<tr>
<td>(d)  The following equipment related to manufacturing activities not resulting in the emission</td>
</tr>
<tr>
<td>of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment.</td>
</tr>
<tr>
<td>(e)  Stockpiled soils from soil remediation activities that are covered and waiting transport</td>
</tr>
<tr>
<td>for disposal.</td>
</tr>
<tr>
<td>(f)  Grinding and machining operations controlled with fabric filters, scrubbers, mist</td>
</tr>
<tr>
<td>collectors and electrostatic precipitators with a design grain loading of less than or equal</td>
</tr>
<tr>
<td>to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual</td>
</tr>
<tr>
<td>cubic feet per minute, including the following: deburring; buffing; polishing; abrasive</td>
</tr>
<tr>
<td>blasting; pneumatic conveying; woodworking operations, tooling operations including dry</td>
</tr>
<tr>
<td>grinding/sanding/cutting stations wet grinding stations using a maximum of 0.09 gallons of</td>
</tr>
<tr>
<td>cutting oil per hour, with emissions controlled by a baghouse and exhausting internally.</td>
</tr>
<tr>
<td>(g)  One (1) diesel fired emergency generator, identified as 450R071, installed in 1989, with</td>
</tr>
<tr>
<td>a site rating of 900 HP.</td>
</tr>
<tr>
<td>Under 40 CFR 63, Subpart ZZZZ, this is considered an existing affected source.</td>
</tr>
<tr>
<td>(h)  Seven (7) dry deburring systems, identified as Dry Deburr 1 - 7, permitted in 2013, each</td>
</tr>
<tr>
<td>with one (1) station for handling parts, one (1) station for drilling and tapping parts, and</td>
</tr>
<tr>
<td>four (4) stations for processing parts through milling and brushing heads, with emissions un-</td>
</tr>
<tr>
<td>controlled, and exhausting within the plant.</td>
</tr>
<tr>
<td>(i)  Waste water treatment plant operations, with a maximum treatment capacity of 150,000</td>
</tr>
<tr>
<td>gallons per day, with emissions uncontrolled.</td>
</tr>
<tr>
<td>(j)  Natural gas-fired combustion sources with heat input equal to or less than ten (10)</td>
</tr>
<tr>
<td>million Btu per hour, including:</td>
</tr>
<tr>
<td>(1)  Three (3) natural gas fired heat treat furnaces, permitted in 2010, each with a</td>
</tr>
<tr>
<td>maximum heat input capacity of 0.8 MMBtu/hr.</td>
</tr>
<tr>
<td>(2)  One (1) natural gas fired heat treat furnace, installed in 2011, with a maximum heat</td>
</tr>
<tr>
<td>input capacity of 0.8 MMBtu/hr.</td>
</tr>
<tr>
<td>(3)  Twenty-six (26) natural gas fired air make-up units, with a total heat input capacity</td>
</tr>
<tr>
<td>of 74.4 MMBtu/hr.</td>
</tr>
<tr>
<td>(s)  Noncontact cooling tower systems with natural draft cooling towers not regulated under</td>
</tr>
<tr>
<td>a NESHAP.</td>
</tr>
<tr>
<td>(t)  Noncontact cooling tower systems with forced and induced draft cooling tower systems</td>
</tr>
<tr>
<td>not regulated under a NESHAP.</td>
</tr>
<tr>
<td>(x)  Paved and unpaved roads and parking lots with public access.</td>
</tr>
</tbody>
</table>
Emission Limitations and Standards  [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter Emission Limitations [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2, particulate matter (PM) emissions from die casting machines, brazing equipment, cutting torches, soldering equipment, welding equipment, grinding and machining operations, stockpiled soil, tooling operations, emergency generator, dry deburring systems, natural gas fired combustion sources, noncontact cooling towers, and paved and unpaved roads, shall not exceed 0.03 grain per dry standard cubic foot (dscf).

D.3.2 Preventive Maintenance Plan  [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.
SECTION E.1  NESHAP

Emissions Unit Description:

(g) One (1) diesel fired emergency generator, identified as 450R071, installed in 1989, with a site rating of 900 HP.

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

(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 (NESHAP) Requirements [326 IAC 2-7-5(1)]


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

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

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

E.1.2 Stationary Reciprocating Internal Combustion Engines NESHAP [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment A to the operating permit), which are incorporated by reference as 326 IAC 20-82, for the emission unit(s) listed above:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585
(3) 40 CFR 63.6590(a)(1)(iii) and (iv)
(4) 40 CFR 63.6595(a)(1), (b), and (c)
(5) 40 CFR 63.6603(a)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6625(e)(3), (f), (h), and (i)
(8) 40 CFR 63.6640(a), (b), (e), (f)(1), (f)(2)(i), and (f)(4)
(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
Source Name: FCA US LLC - Kokomo Casting Plant  
Source Address: 1001 East Boulevard, Kokomo, Indiana 46904  
Part 70 Permit No.: T067-41599-00065

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:
PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: FCA US LLC - Kokomo Casting Plant
Source Address: 1001 East Boulevard, Kokomo, Indiana 46904
Part 70 Permit No.: T067-41599-00065

This form consists of 2 pages

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

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

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:
If any of the following are not applicable, mark N/A

<table>
<thead>
<tr>
<th>Date/Time Emergency started:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date/Time Emergency was corrected:</td>
</tr>
<tr>
<td>Was the facility being properly operated at the time of the emergency?</td>
</tr>
<tr>
<td>Type of Pollutants Emitted: TSP, PM-10, SO₂, VOC, NOₓ, CO, Pb, other:</td>
</tr>
<tr>
<td>Estimated amount of pollutant(s) emitted during emergency:</td>
</tr>
<tr>
<td>Describe the steps taken to mitigate the problem:</td>
</tr>
<tr>
<td>Describe the corrective actions/response steps taken:</td>
</tr>
<tr>
<td>Describe the measures taken to minimize emissions:</td>
</tr>
<tr>
<td>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:</td>
</tr>
</tbody>
</table>

Form Completed by: ________________________________
Title / Position: ________________________________
Date: ________________________________
Phone: ________________________________
**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF AIR QUALITY**  
**COMPLIANCE AND ENFORCEMENT BRANCH**  

**Part 70 Quarterly Report**

Source Name: FCA US LLC - Kokomo Casting Plant  
Source Address: 1001 East Boulevard, Kokomo, Indiana 46904  
Part 70 Permit No.: T067-41599-00065  
Facility: Furnaces 7RF and 8RF  
Parameter: Amount of Flux Used  
Limit: The total annual flux usage to the Reverberatory Furnaces, identified as 7RF and 8RF, shall be less than 30,000 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month.

<table>
<thead>
<tr>
<th>QUARTER:</th>
<th>YEAR:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td>Column 1</td>
</tr>
<tr>
<td></td>
<td>This Month (pounds)</td>
</tr>
</tbody>
</table>

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

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

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

Part 70 Quarterly Report

Source Name: FCA US LLC - Kokomo Casting Plant
Source Address: 1001 East Boulevard, Kokomo, Indiana 46904
Part 70 Permit No.: T067-41599-00065
Facility: Furnaces 9RF and 10RF
Parameter: Amount of Flux Used
Limit: The total annual flux usage to the Reverberatory Furnaces, identified as 9RF and 10RF, shall be less than 41,975 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month.

<table>
<thead>
<tr>
<th>QUARTER : ___________________</th>
<th>YEAR: ___________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td>Column 1 (pounds)</td>
</tr>
<tr>
<td>This Month</td>
<td>Previous 11 Months</td>
</tr>
</tbody>
</table>

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

Submitted by: ________________________________
Title / Position: ____________________________
Signature: ________________________________
Date: ________________________________
Phone: ________________________________
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: FCA US LLC - Kokomo Casting Plant
Source Address: 1001 East Boulevard, Kokomo, Indiana 46904
Part 70 Permit No.: T067-41599-00065
Facility: Furnaces SM3 and 4RF
Parameter: Amount of metal melted
Limit: The total metal melted/remelted to the two (2) furnaces, identified as SM3 and 4RF, shall be less than 50,000 tons per twelve (12) consecutive month period, with compliance determined at the end of the month.

<table>
<thead>
<tr>
<th>QUARTER :</th>
<th>YEAR:</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 1 + Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This Month (tons)</td>
<td>Previous 11 Months (tons)</td>
<td>12 Month Total (tons)</td>
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</tr>
</tbody>
</table>

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
   Deviation has been reported on:

Submitted by: ________________________________
Title / Position: ________________________________
Signature: ________________________________
Date: ________________________________
Phone: ________________________________
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: FCA US LLC - Kokomo Casting Plant
Source Address: 1001 East Boulevard, Kokomo, Indiana 46904
Part 70 Permit No.: T067-41599-00065
Facility: Furnaces SM3 and 4RF
Parameter: Amount of Flux Used
Limit: The combined annual flux usage to the two (2) furnaces, identified as SM3 and 4RF, shall be less than 14,000 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month.

<table>
<thead>
<tr>
<th>QUARTER:</th>
<th>YEAR:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 1 + Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>This Month</td>
<td>Previous 11 Months</td>
<td>12 Month Total</td>
<td></td>
</tr>
<tr>
<td>(pounds)</td>
<td>(pounds)</td>
<td>(pounds)</td>
<td></td>
</tr>
</tbody>
</table>

- [ ] No deviation occurred in this quarter.

- [ ] Deviation/s occurred in this quarter.
  Deviation has been reported on:

Submitted by: ____________________________
Title / Position: ____________________________
Signature: ____________________________
Date: ____________________________
Phone: ____________________________
### Part 70 Quarterly Report

Source Name:  FCA US LLC - Kokomo Casting Plant  
Source Address:  1001 East Boulevard, Kokomo, Indiana 46904  
Part 70 Permit No.:  T067-41599-00065  
Facility:  Furnaces SM5 and 6RF  
Parameter:  Amount of metal melted  
Limit:  The total metal melted/remelted to the two (2) furnaces, identified as SM5 and 6RF, shall be less than 54,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

<table>
<thead>
<tr>
<th>QUARTER</th>
<th>YEAR</th>
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</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 1 + Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>This Month (tons)</td>
<td>Previous 11 Months (tons)</td>
<td>12 Month Total (tons)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Submitted by:  
Title / Position:  
Signature:  
Date:  
Phone:  
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: FCA US LLC - Kokomo Casting Plant
Source Address: 1001 East Boulevard, Kokomo, Indiana 46904
Part 70 Permit No.: T067-41599-00065
Facility: Furnaces SM5 and 6RF
Parameter: Amount of Flux Used
Limit: The combined annual flux usage to the two (2) furnaces, identified as SM5 and 6RF, shall be less than 14,000 pounds per twelve (12) consecutive month period with compliance determined at the end of the month.

<table>
<thead>
<tr>
<th>QUARTER :</th>
<th>YEAR:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>Column 1 (pounds)</th>
<th>Column 2 (pounds)</th>
<th>Column 1 + Column 2 (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on:

Submitted by: ____________________________________________
Title / Position: _______________________________________
Signature: _____________________________________________
Date: _________________________________________________
Phone: ________________________________________________
## Part 70 Quarterly Report

Source Name: FCA US LLC - Kokomo Casting Plant  
Source Address: 1001 East Boulevard, Kokomo, Indiana 46904  
Part 70 Permit No.: T067-41599-00065  
Facility: Furnace 2RF  
Parameter: Annual particulate matter (PM) emissions (tons per year)  
Limit: The particulate matter (PM) emissions from the furnace, identified as 2RF, shall not exceed 0.85 grains per dry standard cubic foot and 92.5 tons per year.

<table>
<thead>
<tr>
<th>QUARTER</th>
<th>YEAR</th>
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<table>
<thead>
<tr>
<th>Month</th>
<th>Column 1</th>
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</tr>
</thead>
<tbody>
<tr>
<td>This Month (tons)</td>
<td>Previous 11 Months (tons)</td>
<td>12 Month Total (tons)</td>
<td></td>
</tr>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Submitted by: ________________________________  
Title / Position: ________________________________  
Signature: ________________________________  
Date: ________________________________  
Phone: ________________________________
**Part 70 Quarterly Report**

**Source Name:** FCA US LLC - Kokomo Casting Plant  
**Source Address:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Part 70 Permit No.:** T067-41599-00065  
**Facility:** Furnace 6RF  
**Parameter:** Annual particulate matter (PM) emissions (tons per year)  
**Limit:** The particulate matter (PM) emissions from the furnace, identified as 6RF, shall not exceed 0.63 grains per dry standard cubic foot and 36.2 tons per year.

<table>
<thead>
<tr>
<th>QUARTER :</th>
<th>YEAR:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Month</th>
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</table>

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

Submitted by: ________________________________  
Title / Position: ________________________________  
Signature: ________________________________  
Date: ________________________________  
Phone: ________________________________
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: FCA US LLC - Kokomo Casting Plant
Source Address: 1001 East Boulevard, Kokomo, Indiana 46904
Part 70 Permit No.: T067-41599-00065

| Months: _______ to _______ | Year: __________ |

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B – Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C - General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

<table>
<thead>
<tr>
<th>Permit Requirement (specify permit condition #)</th>
<th>Date of Deviation:</th>
<th>Duration of Deviation:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

<table>
<thead>
<tr>
<th>Permit Requirement (specify permit condition #)</th>
<th>Date of Deviation:</th>
<th>Duration of Deviation:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:
<table>
<thead>
<tr>
<th>Permit Requirement (specify permit condition #)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Deviation:</td>
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<tr>
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</tr>
<tr>
<td>Probable Cause of Deviation:</td>
</tr>
<tr>
<td>Response Steps Taken:</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Permit Requirement (specify permit condition #)</th>
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<tbody>
<tr>
<td>Date of Deviation:</td>
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<td>Probable Cause of Deviation:</td>
</tr>
<tr>
<td>Response Steps Taken:</td>
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</tbody>
</table>

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<th>Permit Requirement (specify permit condition #)</th>
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</tr>
<tr>
<td>Probable Cause of Deviation:</td>
</tr>
<tr>
<td>Response Steps Taken:</td>
</tr>
</tbody>
</table>

Form Completed by: ________________________________
Title / Position: ________________________________
Date: ________________________________
Phone: ________________________________
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.
40 CFR 63, Subpart ZZZZ
Attachment A
TV No. T067-41599-00065

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

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

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

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


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

This subpart applies to each affected source.

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

(1) Existing stationary RICE.

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

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

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

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

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

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

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

(3) Reconstructed stationary RICE. (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.
(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;
(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

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

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

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

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

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

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

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

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

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

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

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

(b) Area sources that become major sources. If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.
(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

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

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


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.


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

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

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

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

[78 FR 6701, Jan. 30, 2013]

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

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

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

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

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

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

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

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

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

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

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

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

3. Inspect fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replace as necessary.
(4) Inspect all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

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

(e) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart III instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions.

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


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

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

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

(c) Beginning January 1, 2015, if you own or operate a new emergency CI stationary RICE with a site rating of more than 500 brake HP and a displacement of less than 30 liters per cylinder located at a major source of HAP that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.
(d) Existing CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2), or are on offshore vessels that meet §63.6603(c) are exempt from the requirements of this section.

[78 FR 6702, Jan. 30, 2013]

General Compliance Requirements

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

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

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


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.

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

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

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

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

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

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

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

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

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

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

§63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.
§63.6620  What performance tests and other procedures must I use?

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

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

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

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

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

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

(c) [Reserved]

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

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

\[
\frac{C_i - C_o}{C_i} \times 100 \quad (Eq. 1)
\]

Where:

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

\( C_o \) = concentration of CO, THC, or formaldehyde at the control device outlet, and

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

(2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO₂). If pollutant concentrations are to be corrected to 15 percent oxygen and CO₂ concentration is measured in lieu of oxygen concentration measurement, a CO₂ correction factor is needed. Calculate the CO₂ correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific \( F_o \) value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

\[
F_o = \frac{0.209 F_d}{F_c} \quad (Eq. 2)
\]

Where:
\( F_0 \) = Fuel factor based on the ratio of oxygen volume to the ultimate \( \text{CO}_2 \) volume produced by the fuel at zero percent excess air.

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

\( F_d \) = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm3/J (dscf/106 Btu).

\( F_c \) = Ratio of the volume of \( \text{CO}_2 \) produced to the gross calorific value of the fuel from Method 19, dsm3/J (dscf/106 Btu)

(ii) Calculate the \( \text{CO}_2 \) correction factor for correcting measurement data to 15 percent \( \text{O}_2 \), as follows:

\[
X_{\text{CO}_2} = \frac{5.9}{F_0} \quad \text{(Eq. 3)}
\]

Where:

\( X_{\text{CO}_2} \) = \( \text{CO}_2 \) correction factor, percent.

5.9 = 20.9 percent \( \text{O}_2 \)–15 percent \( \text{O}_2 \), the defined \( \text{O}_2 \) correction value, percent.

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent \( \text{O}_2 \) using \( \text{CO}_2 \) as follows:

\[
C_{adj} = C_d \frac{X_{\text{CO}_2}}{\%\text{CO}_2} \quad \text{(Eq. 4)}
\]

Where:

\( C_{adj} \) = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent \( \text{O}_2 \).

\( C_d \) = Measured concentration of CO, THC, or formaldehyde, uncorrected.

\( X_{\text{CO}_2} \) = \( \text{CO}_2 \) correction factor, percent.

\( \%\text{CO}_2 \) = Measured \( \text{CO}_2 \) concentration measured, dry basis, percent.

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

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

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

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

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

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

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

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

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

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

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

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

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

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

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


§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 O2 or CO2 according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR.
part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO₂ concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.

(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d). As specified in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (5) of this section in your site-specific monitoring plan.

(i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

(ii) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;

(iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;

(iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and

(v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).

(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.

(3) The CPMS must collect data at least once every 15 minutes (see also §63.6635).

(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

(6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.
(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

(1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;

(2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;

(5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;

(6) An existing non-emergency, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.

(7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and

(10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet §63.6603(c) do not have to meet the requirements of this paragraph (g).

(1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.
(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

§63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

(d) Non-emergency 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more can demonstrate initial compliance with the formaldehyde emission limit by testing for THC instead of formaldehyde. The testing must be conducted according to the requirements in Table 4 of this subpart. The average reduction of emissions of THC determined from the performance test must be equal to or greater than 30 percent.

(e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

1. The compliance demonstration must consist of at least three test runs.
(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O\textsubscript{2} using one of the O\textsubscript{2} measurement methods specified in Table 4 of this subpart. Measurements to determine O\textsubscript{2} concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O\textsubscript{2} emissions simultaneously at the inlet and outlet of the control device.


Continuous Compliance Requirements

§63.6635  How do I monitor and collect data to demonstrate continuous compliance?

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

[69 FR 33506, June 15, 2004, as amended at 76 FR 12867, Mar. 9, 2011]

§63.6640  How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:
(1) The compliance demonstration must consist of at least one test run.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O₂ using one of the O₂ measurement methods specified in Table 4 of this subpart. Measurements to determine O₂ concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O₂ emissions simultaneously at the inlet and outlet of the control device.

(7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which burns landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.
(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the
engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.


Notifications, Reports, and Records

§63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following:

(1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

(b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).
(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

(i) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and subject to an enforceable state or local standard requiring engine replacement and you intend to meet management practices rather than emission limits, as specified in §63.6603(d), you must submit a notification by March 3, 2013, stating that you intend to use the provision in §63.6603(d) and identifying the state or local regulation that the engine is subject to.

§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 and operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

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

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

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

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

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

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

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

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

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS
downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during
that reporting period.

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

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

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

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

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

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

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

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

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

(h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or
is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in
§63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must submit an annual
report according to the requirements in paragraphs (h)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

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

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §63.6640(f)(2)(ii) and (iii), including the date, start time, and end time
for engine operation for the purposes specified in §63.6640(f)(2)(ii) and (iii).
(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

(ix) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.


§63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE:

1. An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

2. An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

1. An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

2. An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

§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).


Other Requirements and Information

§63.6665 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a
site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

§63.6670 Who implements and enforces this subpart?

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

1) Approval of alternatives to the non-opacity emission limitations and operating limitations in §63.6600 under §63.6(g).

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

3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in §63.6610(b).

§63.6675 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

**Alaska Railbelt Grid** means the service areas of the six regulated public utilities that extend from Fairbanks to Anchorage and the Kenai Peninsula. These utilities are Golden Valley Electric Association; Chugach Electric Association; Matanuska Electric Association; Homer Electric Association; Anchorage Municipal Light & Power; and the City of Seward Electric System.

**Area source** means any stationary source of HAP that is not a major source as defined in part 63.

**Associated equipment** as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

**Backup power for renewable energy** means an engine that provides backup power to a facility that generates electricity from renewable energy resources, as that term is defined in Alaska Statute 42.45.045(l)(5) (incorporated by reference, see §63.14).

**Black start engine** means an engine whose only purpose is to start up a combustion turbine.

**CAA** means the Clean Air Act (42 U.S.C. 7401 et seq., as amended by Public Law 101-549, 104 Stat. 2399).
Commercial emergency stationary RICE means an emergency stationary RICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor’s offices, and sports and performing arts facilities.

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

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless 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 CO₂.

Dual-fuel engine means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in §63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in §63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

(1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

(2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §63.6640(f).
(3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §63.6640(f)(2)(ii) or (iii) and §63.6640(f)(4)(i) or (ii).

**Engine startup** means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

**Four-stroke engine** means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

**Gaseous fuel** means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

**Gasoline** means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

**Glycol dehydration unit** means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes “rich” glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The “lean” glycol is then recycled.

**Hazardous air pollutants (HAP)** means any air pollutants listed in or pursuant to section 112(b) of the CAA.

**Institutional emergency stationary RICE** means an emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

**ISO standard day conditions** means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

**Landfill gas** means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO₂.

**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 (NOx) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NOx, CO, and volatile organic compounds (VOC) into CO2, 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 lease 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 C3H8.
Remote stationary RICE means stationary RICE meeting any of the following criteria:

1. Stationary RICE located in an offshore area that is beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters.

2. Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (2)(i) and (ii) of this definition.

   (i) A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.

   (ii) The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.

   (iii) For purposes of this paragraph (2), the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 meters) of the pipeline segment providing power for equipment on a pipeline segment are part of the pipeline segment. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline, or the storage of gas. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

3. Stationary RICE that are not located on gas pipelines and that have 5 or fewer buildings intended for human occupancy and no buildings with four or more stories within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

Residential emergency stationary RICE means an emergency stationary RICE used in residential establishments such as homes or apartment buildings.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NOx (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition means relating to either: A gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.
Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart PPPPP of this part, that tests stationary RICE.

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

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

Subpart means 40 CFR part 63, subpart ZZZZ.

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

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


Table 1a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations at 100 percent load plus or minus 10 percent for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

<table>
<thead>
<tr>
<th>For each</th>
<th>You must meet the following emission limitation, except during periods of startup . . .</th>
<th>During periods of startup you must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 4SRB stationary RICE</td>
<td>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 b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O2</td>
<td>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</td>
</tr>
</tbody>
</table>

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

Table 1b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed SI 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600, 63.6603, 63.6630 and 63.6640, you must comply with the following operating limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

For each . . .

<table>
<thead>
<tr>
<th>You must meet the following operating limitation, except during periods of startup . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. existing, new and reconstructed 4SRB stationary RICE &gt;500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or existing, new and reconstructed 4SRB stationary RICE &gt;500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O\textsubscript{2} and using NSCR;</td>
</tr>
<tr>
<td>a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.¹</td>
</tr>
<tr>
<td>2. existing, new and reconstructed 4SRB stationary RICE &gt;500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or existing, new and reconstructed 4SRB stationary RICE &gt;500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O\textsubscript{2} and not using NSCR.</td>
</tr>
<tr>
<td>Comply with any operating limitations approved by the Administrator.</td>
</tr>
</tbody>
</table>

¹Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6706, Jan. 30, 2013]

Table 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:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following emission limitation, except during periods of startup . . .</th>
<th>During periods of startup you must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 2SLB stationary RICE</td>
<td>a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O\textsubscript{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\textsubscript{2} until June 15, 2007</td>
<td>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</td>
</tr>
<tr>
<td>2. 4SLB stationary RICE</td>
<td>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\textsubscript{2}</td>
<td></td>
</tr>
</tbody>
</table>
For each . . . | You must meet the following emission limitation, except during periods of startup . . . | During periods of startup you must . . .
---|---|---
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 O₂ |  

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 CI Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions, Existing CI Stationary RICE >500 HP

As stated in §§63.6600, 63.6601, 63.6603, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions; new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions; and existing CI stationary RICE >500 HP:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following operating limitation, except during periods of startup . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. New and reconstructed 2SLB and CI stationary RICE &gt;500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE &gt;500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.</td>
<td>a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.¹</td>
</tr>
<tr>
<td>2. Existing CI stationary RICE &gt;500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst</td>
<td>a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and 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</td>
</tr>
<tr>
<td>3. New and reconstructed 2SLB and CI stationary RICE &gt;500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and not using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE &gt;500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; and</td>
<td>Comply with any operating limitations approved by the Administrator.</td>
</tr>
</tbody>
</table>
Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE ≤500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600, 63.6602, and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE located at a major source of HAP emissions and existing spark ignition stationary RICE ≤500 HP located at a major source of HAP emissions:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following requirement, except during periods of startup . . .</th>
<th>During periods of startup you must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Emergency stationary CI RICE and black start stationary CI RICE$^1$</td>
<td>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, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.$^3$</td>
<td>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.$^3$</td>
</tr>
<tr>
<td>2. Non-Emergency, non-black start stationary CI RICE &lt;100 HP</td>
<td>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, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.$^3$</td>
<td>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.$^3$</td>
</tr>
<tr>
<td>3. Non-Emergency, non-black start CI stationary RICE 100≤HP≤300 HP</td>
<td>Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O$_2$</td>
<td></td>
</tr>
</tbody>
</table>

$^1$Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6707, Jan. 30, 2013]
<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following requirement, except during periods of startup . . .</th>
<th>During periods of startup you must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Non-Emergency, non-black start CI stationary RICE 300&lt;HP≤500</td>
<td>a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O₂; or b. Reduce CO emissions by 70 percent or more.</td>
<td></td>
</tr>
<tr>
<td>5. Non-Emergency, non-black start stationary CI RICE &gt;500 HP</td>
<td>a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O₂; or b. Reduce CO emissions by 70 percent or more.</td>
<td></td>
</tr>
<tr>
<td>6. Emergency stationary SI RICE and black start stationary SI RICE.¹</td>
<td>a. Change oil and filter every 500 hours of operation or annually, whichever comes first;² b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.³</td>
<td></td>
</tr>
<tr>
<td>7. Non-Emergency, non-black start stationary SI RICE &lt;100 HP that are not 2SLB stationary RICE</td>
<td>a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;² b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.³</td>
<td></td>
</tr>
<tr>
<td>8. Non-Emergency, non-black start 2SLB stationary SI RICE &lt;100 HP</td>
<td>a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first;² b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.³</td>
<td></td>
</tr>
<tr>
<td>For each . . .</td>
<td>You must meet the following requirement, except during periods of startup . . .</td>
<td>During periods of startup you must . . .</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>9. Non-emergency, non-black start 2SLB stationary RICE 100≤HP≤500</td>
<td>Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O$_2$.</td>
<td></td>
</tr>
<tr>
<td>10. Non-emergency, non-black start 4SLB stationary RICE 100≤HP≤500</td>
<td>Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd or less at 15 percent O$_2$.</td>
<td></td>
</tr>
<tr>
<td>11. Non-emergency, non-black start 4SRB stationary RICE 100≤HP≤500</td>
<td>Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O$_2$.</td>
<td></td>
</tr>
<tr>
<td>12. Non-emergency, non-black start stationary RICE 100≤HP≤500 which</td>
<td>Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O$_2$.</td>
<td></td>
</tr>
<tr>
<td>combusts landfill or digester gas equivalent to 10 percent or more of the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gross heat input on an annual basis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1If 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.

2Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2c of this subpart.

3Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[78 FR 6708, Jan. 30, 2013, as amended at 78 FR 14457, Mar. 6, 2013]
Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following requirement, except during periods of startup . . .</th>
<th>During periods of startup you must . . .</th>
</tr>
</thead>
</table>
| 1. Non-Emergency, non-black start CI stationary RICE ≤300 HP                  | a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;¹  
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;  
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. | Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. |
| 2. Non-Emergency, non-black start CI stationary RICE 300<HP≤500                | a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmv at 15 percent O₂; or |                                                                                                                |
| 3. Non-Emergency, non-black start CI stationary RICE >500 HP                  | a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmv at 15 percent O₂; or |                                                                                                                |
| 4. Emergency stationary CI RICE and black start stationary CI RICE.²         | 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, and replace as necessary; and  
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. |                                                                                                                |
For each . . . | You must meet the following requirement, except during periods of startup . . . | During periods of startup you must . . .
---|---|---

5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year.\(^2\)

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first;\(^1\)
- b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

6. Non-emergency, non-black start 2SLB stationary RICE

- a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first;\(^1\)
- b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; and
- c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.

7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP

- a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;\(^1\)
- b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and
- c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.

8. Non-emergency, non-black start 4SLB remote stationary RICE >500 HP

- a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first;\(^1\)
- b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and
<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following requirement, except during periods of startup . . .</th>
<th>During periods of startup you must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Non-emergency, non-black start 4SLB stationary RICE &gt;500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year</td>
<td>Install an oxidation catalyst to reduce HAP emissions from the stationary RICE.</td>
<td></td>
</tr>
<tr>
<td>10. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP</td>
<td>a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;¹</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.</td>
<td></td>
</tr>
<tr>
<td>11. Non-emergency, non-black start 4SRB remote stationary RICE &gt;500 HP</td>
<td>a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first;¹</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.</td>
<td></td>
</tr>
<tr>
<td>12. Non-emergency, non-black start 4SRB stationary RICE &gt;500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year</td>
<td>Install NSCR to reduce HAP emissions from the stationary RICE.</td>
<td></td>
</tr>
<tr>
<td>13. Non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis</td>
<td>a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;¹</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and</td>
<td></td>
</tr>
</tbody>
</table>
For each . . . | You must meet the following requirement, except during periods of startup . . . | During periods of startup you must . . .
---|---|---
c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.

1Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

2If 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.

[78 FR 6709, Jan. 30, 2013]

Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests

As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

| For each . . . | Complying with the requirement to . . . | You must . . . |
---|---|---
1. New or reconstructed 2SLB stationary RICE >500 HP located at major sources; new or reconstructed 4SLB stationary RICE ≥250 HP located at major sources; and new or reconstructed CI stationary RICE >500 HP located at major sources | Reduce CO emissions and not using a CEMS | Conduct subsequent performance tests semiannually.¹ |
2. 4SRB stationary RICE ≥5,000 HP located at major sources | Reduce formaldehyde emissions | Conduct subsequent performance tests semiannually.¹ |
3. Stationary RICE >500 HP located at major sources and new or reconstructed 4SLB stationary RICE 250≤HP≤500 located at major sources | Limit the concentration of formaldehyde in the stationary RICE exhaust | Conduct subsequent performance tests semiannually.¹ |
4. Existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE | Limit or reduce CO emissions and not using a CEMS | Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first. |
5. Existing non-emergency, non-black start CI stationary RICE >500 HP that are limited use stationary RICE | Limit or reduce CO emissions and not using a CEMS | Conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first. |

¹After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6711, Jan. 30, 2013]
Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

As stated in §§63.6610, 63.6611, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE:

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

<table>
<thead>
<tr>
<th>For each</th>
<th>Complying with the requirement to</th>
<th>You must . . .</th>
<th>Using . . .</th>
<th>According to the following requirements . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 2SLB, 4SLB,</td>
<td>a. reduce CO emissions</td>
<td>i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CI stationary RICE</td>
<td></td>
<td></td>
<td>(a) For CO and O₂ measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts &gt;6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is &gt;12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(b) Measurements to determine O₂ must be made at the same time as the measurements for CO concentration.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ii. Measure the O₂ at the inlet and outlet of the control device; and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)ac (heated probe not necessary)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>iii. Measure the CO at the inlet and the outlet of the control device</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) ASTM D6522-00 (Reapproved 2005)abc (heated probe not necessary) or Method 10 of 40 CFR part 60, appendix A-4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(c) The CO concentration must be at 15 percent O₂, dry basis.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For each . . .</td>
<td>Complying with the requirement to . . .</td>
<td>You must . . .</td>
<td>Using . . .</td>
<td>According to the following requirements . . .</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------------------------------</td>
<td>----------------</td>
<td>--------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>2. 4SRB stationary RICE</td>
<td>a. reduce formaldehyde emissions</td>
<td>i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and</td>
<td>(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)* (heated probe not necessary)</td>
<td>(a) For formaldehyde, O₂, and moisture measurement. Ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts &gt;6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is &gt;12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Measure O₂ at the inlet and outlet of the control device; and</td>
<td>(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)* (heated probe not necessary)</td>
<td>(a) Measurements to determine O₂ concentration must be made at the same time as the measurements for formaldehyde or THC concentration.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Measure moisture content at the inlet and outlet of the control device; and</td>
<td>(1) Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03a</td>
<td>(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or THC concentration.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iv. If demonstrating compliance with the formaldehyde percent reduction requirement, measure formaldehyde at the inlet and the outlet of the control device</td>
<td>(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03a, 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</td>
<td>(a) Formaldehyde concentration must be at 15 percent O₂, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>v. If demonstrating compliance with the THC percent reduction requirement, measure THC at the inlet and the outlet of the control device</td>
<td>(1) Method 25A, reported as propane, of 40 CFR part 60, appendix A-7</td>
<td>(a) THC concentration must be at 15 percent O₂, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.</td>
</tr>
</tbody>
</table>
For each... | Complying with the requirement to... | You must... | Using... | According to the following requirements...
---|-----------------------------------|------------|---------|-----------------------------------
| 3. Stationary RICE | a. limit the concentration of formaldehyde or CO in the stationary RICE exhaust | i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary RICE; and | (a) For formaldehyde, CO, O₂, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (‘3-point long line’). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at ‘3-point long line’; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A. If using a control device, the sampling site must be located at the outlet of the control device. | |
| | | ii. Determine the O₂ concentration of the stationary RICE exhaust at the sampling port location; and | (1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)a (heated probe not necessary) | (a) Measurements to determine O₂ concentration must be made at the same time and location as the measurements for formaldehyde or CO concentration. |
| | | iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and | (1) Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03a | (a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration. |
| | | iv. Measure formaldehyde at the exhaust of the stationary RICE; or | (1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03a, 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 O₂, 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-4, ASTM Method D6522-00 (2005)ac, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03a | (a) CO concentration must be at 15 percent O₂, dry basis. Results of this test consist of the average of the three 1-hour or longer runs. |
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.

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.

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

As stated in §§63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>Complying with the requirement to . . .</th>
<th>You have demonstrated initial compliance if . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP</td>
<td>a. Reduce CO emissions and using oxidation catalyst, and using a CPMS</td>
<td>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.</td>
</tr>
<tr>
<td>2. Non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP</td>
<td>a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS</td>
<td>i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</td>
</tr>
<tr>
<td>3. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP</td>
<td>a. Reduce CO emissions and not using oxidation catalyst</td>
<td>i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.</td>
</tr>
<tr>
<td>For each . . .</td>
<td>Complying with the requirement to . . .</td>
<td>You have demonstrated initial compliance if . . .</td>
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</tr>
</tbody>
</table>
| 4. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP | a. Limit the concentration of CO, and not using oxidation catalyst | i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and  
ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and  
iii. You have recorded the approved operating parameters (if any) during the initial performance test. |
| 5. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP | a. Reduce CO emissions, and using a CEMS | i. You have installed a CEMS to continuously monitor CO and either O₂ or CO₂ at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and  
ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and  
iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period. |
| 6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP | a. Limit the concentration of CO, and using a CEMS | i. You have installed a CEMS to continuously monitor CO and either O₂ or CO₂ at the outlet of the oxidation catalyst according to the requirements in §63.6625(a); and  
ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and  
iii. The average concentration of CO calculated using §63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period. |
<p>| 7. Non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP | a. Reduce formaldehyde emissions and using NSCR | i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction, or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and |</p>
<table>
<thead>
<tr>
<th>For each . . .</th>
<th>Complying with the requirement to . . .</th>
<th>You have demonstrated initial compliance if . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and</td>
<td>i. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</td>
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<tr>
<td></td>
<td></td>
<td>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</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. You have recorded the approved operating parameters (if any) during the initial performance test.</td>
</tr>
<tr>
<td>8. Non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP</td>
<td>a. Reduce formaldehyde emissions and not using NSCR</td>
<td>i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and</td>
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<td></td>
<td>iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</td>
</tr>
<tr>
<td>9. New or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP</td>
<td>a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR</td>
<td>i. The average formaldehyde concentration, corrected to 15 percent O₂, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and</td>
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<tr>
<td></td>
<td></td>
<td>iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</td>
</tr>
<tr>
<td>10. New or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP</td>
<td>a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR</td>
<td>i. The average formaldehyde concentration, corrected to 15 percent O₂, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>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</td>
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<tr>
<td></td>
<td></td>
<td>iii. You have recorded the approved operating parameters (if any) during the initial performance test.</td>
</tr>
<tr>
<td>11. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300&lt;HP≤500 located at an area source of HAP</td>
<td>a. Reduce CO emissions</td>
<td>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.</td>
</tr>
<tr>
<td>For each . . .</td>
<td>Complying with the requirement to . . .</td>
<td>You have demonstrated initial compliance if . . .</td>
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</tr>
<tr>
<td>12. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP and existing non-emergency stationary CI RICE 300&lt;HP≤500 located at an area source of HAP</td>
<td>a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust</td>
<td>i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O₂, dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.</td>
</tr>
</tbody>
</table>
| 13. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year | a. Install an oxidation catalyst | i. You have conducted an initial compliance demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O₂;  
ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F. |
| 14. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year | a. Install NSCR | i. You have conducted an initial compliance demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O₂, or the average reduction of emissions of THC is 30 percent or more;  
ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1250 °F. |

[78 FR 6712, Jan. 30, 2013]

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements

As stated in §63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>Complying with the requirement to . . .</th>
<th>You must demonstrate continuous compliance by . . .</th>
</tr>
</thead>
</table>
| 1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP | a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS | i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved; and  
ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and  
iii. Reducing these data to 4-hour rolling averages; and |
<table>
<thead>
<tr>
<th>For each . . .</th>
<th>Complying with the requirement to . . .</th>
<th>You must demonstrate continuous compliance by . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature;</td>
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</tr>
<tr>
<td>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.</td>
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</tr>
</tbody>
</table>

2. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP

   a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS

   i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved; 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 parameter established during the performance test.

3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, new or reconstructed non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP

   a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS

   i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction or concentration of CO emissions according to §63.6620; and
   ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period, or that the emission remain at or below the CO concentration limit; and
   iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP

   a. Reduce formaldehyde emissions and using NSCR

   i. Collecting the catalyst inlet temperature data according to §63.6625(b); and
   ii. Reducing these data to 4-hour rolling averages; and
   iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
   iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
<table>
<thead>
<tr>
<th>For each . . .</th>
<th>Complying with the requirement to . . .</th>
<th>You must demonstrate continuous compliance by . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP</td>
<td>a. Reduce formaldehyde emissions and not using NSCR</td>
<td>i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and</td>
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<tr>
<td></td>
<td></td>
<td>ii. Reducing these data to 4-hour rolling averages; and</td>
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<td></td>
<td></td>
<td>iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</td>
</tr>
<tr>
<td>6. Non-emergency 4SRB stationary RICE with a brake HP ≥5,000 located at a major source of HAP</td>
<td>a. Reduce formaldehyde emissions</td>
<td>Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved, or to demonstrate that the average reduction of emissions of THC determined from the performance test is equal to or greater than 30 percent.³³</td>
</tr>
<tr>
<td>7. New or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP</td>
<td>a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR</td>
<td>i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit³³; and  ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Reducing these data to 4-hour rolling averages; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>8. New or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP</td>
<td>a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR</td>
<td>i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit³³; and  ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Reducing these data to 4-hour rolling averages; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</td>
</tr>
<tr>
<td>For each . . .</td>
<td>Complying with the requirement to . . .</td>
<td>You must demonstrate continuous compliance by . . .</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE &lt;100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combuts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE &gt;500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE &gt;500 HP located at an area source of HAP that are remote stationary RICE</td>
<td>a. Work or Management practices</td>
<td>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.</td>
</tr>
<tr>
<td>10. Existing stationary CI RICE &gt;500 HP that are not limited use stationary RICE</td>
<td>a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst</td>
<td>i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.</td>
</tr>
<tr>
<td>11. Existing stationary CI RICE &gt;500 HP that are not limited use stationary RICE</td>
<td>a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and not using oxidation catalyst</td>
<td>i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and</td>
</tr>
<tr>
<td>For each . . .</td>
<td>Complying with the requirement to . . .</td>
<td>You must demonstrate continuous compliance by . . .</td>
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<tr>
<td></td>
<td></td>
<td>iii. Reducing these data to 4-hour rolling averages; and</td>
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<td></td>
<td></td>
<td>iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</td>
</tr>
<tr>
<td>12. Existing limited use CI stationary RICE &gt;500 HP</td>
<td>a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using an oxidation catalyst</td>
<td>i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and</td>
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<td></td>
<td>ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and</td>
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<td></td>
<td></td>
<td>iii. Reducing these data to 4-hour rolling averages; and</td>
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<td></td>
<td>iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and</td>
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<td></td>
<td>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.</td>
</tr>
<tr>
<td>13. Existing limited use CI stationary RICE &gt;500 HP</td>
<td>a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and not using an oxidation catalyst</td>
<td>i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Reducing these data to 4-hour rolling averages; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</td>
</tr>
</tbody>
</table>
For each . . . | Complying with the requirement to . . . | You must demonstrate continuous compliance by . . .
--- | --- | ---
14. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year | a. Install an oxidation catalyst | i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O₂; and either ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.
15. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year | a. Install NSCR | i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O₂, or the average reduction of emissions of THC is 30 percent or more; and either ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F.

After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6715, Jan. 30, 2013]
Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in §63.6650, you must comply with the following requirements for reports:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must submit a . . .</th>
<th>The report must contain . . .</th>
<th>You must submit the report . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Existing non-emergency, non-black start stationary RICE 100s&lt;HP≤500 located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE &gt;500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP; and new or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP</td>
<td>Compliance report</td>
<td>a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or</td>
<td>i. Semiannually according to the requirements in §63.6650(b)(1)-(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and ii. Annually according to the requirements in §63.6650(b)(6)-(9) for engines that are limited use stationary RICE subject to numerical emission limitations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>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</td>
<td>i. Semiannually according to the requirements in §63.6650(b).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4).</td>
<td>i. Semiannually according to the requirements in §63.6650(b).</td>
</tr>
<tr>
<td>2. New or reconstructed non-emergency stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis</td>
<td>Report</td>
<td>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</td>
<td>i. Annually, according to the requirements in §63.6650.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and</td>
<td>i. See item 2.a.i.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Any problems or errors suspected with the meters.</td>
<td>i. See item 2.a.i.</td>
</tr>
<tr>
<td>3. Existing non-emergency, non-black start 4SLB and 4SRB stationary RICE &gt;500 HP located at an area source of HAP that are not remote stationary RICE and that operate more than 24 hours per calendar year</td>
<td>Compliance report</td>
<td>a. The results of the annual compliance demonstration, if conducted during the reporting period.</td>
<td>i. Semiannually according to the requirements in §63.6650(b)(1)-(5).</td>
</tr>
</tbody>
</table>
For each . . .

You must submit a . . .

The report must contain . . .

You must submit the report . . .

| 4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in §63.6640(f)(4) | Report | a. The information in §63.6650(h)(1) i. annually according to the requirements in §63.6650(h)(2)-(3). |

[78 FR 6719, Jan. 30, 2013]

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

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

<table>
<thead>
<tr>
<th>General provisions citation</th>
<th>Subject of citation</th>
<th>Applies to subpart</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.1</td>
<td>General applicability of the General Provisions</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.2</td>
<td>Definitions</td>
<td>Yes</td>
<td>Additional terms defined in §63.6675.</td>
</tr>
<tr>
<td>§63.3</td>
<td>Units and abbreviations</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.4</td>
<td>Prohibited activities and circumvention</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.5</td>
<td>Construction and reconstruction</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(a)</td>
<td>Applicability</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(1)-(4)</td>
<td>Compliance dates for new and reconstructed sources</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(5)</td>
<td>Notification</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(6)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(7)</td>
<td>Compliance dates for new and reconstructed area sources that become major sources</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(c)(1)-(2)</td>
<td>Compliance dates for existing sources</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(c)(3)-(4)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(c)(5)</td>
<td>Compliance dates for existing area sources that become major sources</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(d)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(e)</td>
<td>Operation and maintenance</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(f)(1)</td>
<td>Applicability of standards</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(f)(2)</td>
<td>Methods for determining compliance</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(f)(3)</td>
<td>Finding of compliance</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(g)(1)-(3)</td>
<td>Use of alternate standard</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)</td>
<td>Opacity and visible emission standards</td>
<td>No</td>
<td>Subpart ZZZZ does not contain opacity or visible emission standards.</td>
</tr>
<tr>
<td>§63.6(i)</td>
<td>Compliance extension procedures and criteria</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>General provisions citation</td>
<td>Subject of citation</td>
<td>Applies to subpart</td>
<td>Explanation</td>
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</tr>
<tr>
<td>§63.6(j)</td>
<td>Presidential compliance exemption</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(a)(1)-(2)</td>
<td>Performance test dates</td>
<td>Yes</td>
<td>Subpart ZZZZ contains performance test dates at §§63.6610, 63.6611, and 63.6612.</td>
</tr>
<tr>
<td>§63.7(a)(3)</td>
<td>CAA section 114 authority</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(b)(1)</td>
<td>Notification of performance test</td>
<td>Yes</td>
<td>Except that §63.7(b)(1) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.7(b)(2)</td>
<td>Notification of rescheduling</td>
<td>Yes</td>
<td>Except that §63.7(b)(2) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.7(c)</td>
<td>Quality assurance/test plan</td>
<td>Yes</td>
<td>Except that §63.7(c) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.7(d)</td>
<td>Testing facilities</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(e)(1)</td>
<td>Conditions for conducting performance tests</td>
<td>No.</td>
<td>Subpart ZZZZ specifies conditions for conducting performance tests at §63.6620.</td>
</tr>
<tr>
<td>§63.7(e)(2)</td>
<td>Conduct of performance tests and reduction of data</td>
<td>Yes</td>
<td>Subpart ZZZZ specifies test methods at §63.6620.</td>
</tr>
<tr>
<td>§63.7(e)(3)</td>
<td>Test run duration</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(e)(4)</td>
<td>Administrator may require other testing under section 114 of the CAA</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(f)</td>
<td>Alternative test method provisions</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(g)</td>
<td>Performance test data analysis, recordkeeping, and reporting</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(h)</td>
<td>Waiver of tests</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.8(a)(1)</td>
<td>Applicability of monitoring requirements</td>
<td>Yes</td>
<td>Subpart ZZZZ contains specific requirements for monitoring at §63.6625.</td>
</tr>
<tr>
<td>§63.8(a)(2)</td>
<td>Performance specifications</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.8(a)(3)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.8(a)(4)</td>
<td>Monitoring for control devices</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.8(b)(1)</td>
<td>Monitoring</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.8(b)(2)-(3)</td>
<td>Multiple effluents and multiple monitoring systems</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(1)</td>
<td>Monitoring system operation and maintenance</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(1)(i)</td>
<td>Routine and predictable SSM</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(1)(ii)</td>
<td>SSM not in Startup Shutoff Malfunction Plan</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(1)(iii)</td>
<td>Compliance with operation and maintenance requirements</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(2)-(3)</td>
<td>Monitoring system installation</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(4)</td>
<td>Continuous monitoring system (CMS) requirements</td>
<td>Yes</td>
<td>Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).</td>
</tr>
<tr>
<td>§63.8(c)(5)</td>
<td>COMS minimum procedures</td>
<td>No</td>
<td>Subpart ZZZZ does not require COMS.</td>
</tr>
<tr>
<td>§63.8(c)(6)-(8)</td>
<td>CMS requirements</td>
<td>Yes</td>
<td>Except that subpart ZZZZ does not require COMS.</td>
</tr>
<tr>
<td>General provisions citation</td>
<td>Subject of citation</td>
<td>Applies to subpart</td>
<td>Explanation</td>
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</tr>
<tr>
<td>§63.8(d)</td>
<td>CMS quality control</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.8(e)</td>
<td>CMS performance evaluation</td>
<td>Yes</td>
<td>Except for §63.8(e)(5)(ii), which applies to COMS.</td>
</tr>
<tr>
<td>§63.8(f)(1)-(5)</td>
<td>Alternative monitoring method</td>
<td>Yes</td>
<td>Except that §63.8(f)(4) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.8(f)(6)</td>
<td>Alternative to relative accuracy test</td>
<td>Yes</td>
<td>Except that §63.8(f)(6) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.8(g)</td>
<td>Data reduction</td>
<td>Yes</td>
<td>Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.</td>
</tr>
<tr>
<td>§63.9(a)</td>
<td>Applicability and State delegation of notification requirements</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.9(b)(1)-(5)</td>
<td>Initial notifications</td>
<td>Yes</td>
<td>Except that §63.9(b)(3) is reserved.</td>
</tr>
<tr>
<td>§63.9(c)</td>
<td>Request for compliance extension</td>
<td>Yes</td>
<td>Except that §63.9(c) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.9(d)</td>
<td>Notification of special compliance requirements for new sources</td>
<td>Yes</td>
<td>Except that §63.9(d) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.9(e)</td>
<td>Notification of performance test</td>
<td>Yes</td>
<td>Except that §63.9(e) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.9(f)</td>
<td>Notification of visible emission (VE)/opacity test</td>
<td>No</td>
<td>Subpart ZZZZ does not contain opacity or VE standards.</td>
</tr>
<tr>
<td>§63.9(g)(1)</td>
<td>Notification of performance evaluation</td>
<td>Yes</td>
<td>Except that §63.9(g) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.9(g)(2)</td>
<td>Notification of use of COMS data</td>
<td>No</td>
<td>Subpart ZZZZ does not contain opacity or VE standards.</td>
</tr>
<tr>
<td>§63.9(g)(3)</td>
<td>Notification that criterion for alternative to RATA is exceeded</td>
<td>Yes</td>
<td>If alternative is in use.</td>
</tr>
<tr>
<td>§63.9(h)(1)-(6)</td>
<td>Notification of compliance status</td>
<td>Yes</td>
<td>Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.</td>
</tr>
<tr>
<td>§63.9(i)</td>
<td>Adjustment of submittal deadlines</td>
<td>Yes</td>
<td>Except that §63.9(h) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.9(j)</td>
<td>Change in previous information</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>General provisions citation</td>
<td>Subject of citation</td>
<td>Applies to subpart</td>
<td>Explanation</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-------------------------------------------------</td>
<td>--------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>§63.10(a)</td>
<td>Administrative provisions for recordkeeping/reporting</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(1)</td>
<td>Record retention</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(2)(i)-(v)</td>
<td>Records related to SSM</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(2)(vi)-(xi)</td>
<td>Records when using alternative to RATA</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(2)(xii)</td>
<td>Records when under waiver</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(2)(xiii)</td>
<td>Records of supporting documentation</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(3)</td>
<td>Additional records for sources using CEMS</td>
<td>Yes.</td>
<td>Except that §63.10(c)(2)-(4) and (9) are reserved.</td>
</tr>
<tr>
<td>§63.10(c)</td>
<td>General reporting requirements</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(d)(1)</td>
<td>Report of performance test results</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(d)(3)</td>
<td>Reporting opacity or VE observations</td>
<td>No.</td>
<td>Subpart ZZZZ does not contain opacity or VE standards.</td>
</tr>
<tr>
<td>§63.10(d)(4)</td>
<td>Progress reports</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(d)(5)</td>
<td>Startup, shutdown, and malfunction reports</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.10(e)(1) and (2)(i)</td>
<td>Additional CMS Reports</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(e)(2)(ii)</td>
<td>COMS-related report</td>
<td>No.</td>
<td>Subpart ZZZZ does not require COMS.</td>
</tr>
<tr>
<td>§63.10(e)(3)</td>
<td>Excess emission and parameter exceedances reports</td>
<td>Yes.</td>
<td>Except that §63.10(e)(3)(i) (C) is reserved.</td>
</tr>
<tr>
<td>§63.10(e)(4)</td>
<td>Reporting COMS data</td>
<td>No.</td>
<td>Subpart ZZZZ does not require COMS.</td>
</tr>
<tr>
<td>§63.10(f)</td>
<td>Waiver for recordkeeping/reporting</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.11</td>
<td>Flares</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.12</td>
<td>State authority and delegations</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.13</td>
<td>Addresses</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.14</td>
<td>Incorporation by reference</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.15</td>
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Appendix A—Protocol for Using an Electrochemical Analyzer to Determine Oxygen and Carbon Monoxide Concentrations From Certain Engines

1.0 Scope and Application. What is this Protocol?

This protocol is a procedure for using portable electrochemical (EC) cells for measuring carbon monoxide (CO) and oxygen (O₂) concentrations in controlled and uncontrolled emissions from existing stationary 4-stroke lean burn and 4-stroke rich burn reciprocating internal combustion engines as specified in the applicable rule.

1.1 Analytes. What does this protocol determine?

This protocol measures the engine exhaust gas concentrations of carbon monoxide (CO) and oxygen (O₂).

<table>
<thead>
<tr>
<th>Analyte</th>
<th>CAS No.</th>
<th>Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon monoxide</td>
<td>630-08-0</td>
<td>Minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.</td>
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<tr>
<td>O₂</td>
<td>7782-44-7</td>
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</table>

1.2 Applicability. When is this protocol acceptable?

This protocol is applicable to 40 CFR part 63, subpart ZZZZ. Because of inherent cross sensitivities of EC cells, you must not apply this protocol to other emissions sources without specific instruction to that effect.

1.3 Data Quality Objectives. How good must my collected data be?

Refer to Section 13 to verify and document acceptable analyzer performance.

1.4 Range. What is the targeted analytical range for this protocol?

The measurement system and EC cell design(s) conforming to this protocol will determine the analytical range for each gas component. The nominal ranges are defined by choosing up-scale calibration gas concentrations near the maximum anticipated flue gas concentrations for CO and O₂, or no more than twice the permitted CO level.

1.5 Sensitivity. What minimum detectable limit will this protocol yield for a particular gas component?

The minimum detectable limit depends on the nominal range and resolution of the specific EC cell used, and the signal to noise ratio of the measurement system. The minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.

2.0 Summary of Protocol

In this protocol, a gas sample is extracted from an engine exhaust system and then conveyed to a portable EC analyzer for measurement of CO and O₂ gas concentrations. This method provides measurement system performance specifications and sampling protocols to ensure reliable data. You may use additions to, or modifications of vendor supplied measurement systems (e.g., heated or unheated sample lines, thermocouples, flow meters, selective gas scrubbers, etc.) to meet the design specifications of this protocol. Do not make changes to the measurement system from the as-verified configuration (Section 3.12).

3.0 Definitions

3.1 Measurement System. The total equipment required for the measurement of CO and O₂ concentrations. The measurement system consists of the following major subsystems:
3.1.1 **Data Recorder.** A strip chart recorder, computer or digital recorder for logging measurement data from the analyzer output. You may record measurement data from the digital data display manually or electronically.

3.1.2 **Electrochemical (EC) Cell.** A device, similar to a fuel cell, used to sense the presence of a specific analyte and generate an electrical current output proportional to the analyte concentration.

3.1.3 **Interference Gas Scrubber.** A device used to remove or neutralize chemical compounds that may interfere with the selective operation of an EC cell.

3.1.4 **Moisture Removal System.** Any device used to reduce the concentration of moisture in the sample stream so as to protect the EC cells from the damaging effects of condensation and to minimize errors in measurements caused by the scrubbing of soluble gases.

3.1.5 **Sample Interface.** The portion of the system used for one or more of the following: sample acquisition; sample transport; sample conditioning or protection of the EC cell from any degrading effects of the engine exhaust effluent; removal of particulate matter and condensed moisture.

3.2 **Nominal Range.** The range of analyte concentrations over which each EC cell is operated (normally 25 percent to 150 percent of up-scale calibration gas value). Several nominal ranges can be used for any given cell so long as the calibration and repeatability checks for that range remain within specifications.

3.3 **Calibration Gas.** A vendor certified concentration of a specific analyte in an appropriate balance gas.

3.4 **Zero Calibration Error.** The analyte concentration output exhibited by the EC cell in response to zero-level calibration gas.

3.5 **Up-Scale Calibration Error.** The mean of the difference between the analyte concentration exhibited by the EC cell and the certified concentration of the up-scale calibration gas.

3.6 **Interference Check.** A procedure for quantifying analytical interference from components in the engine exhaust gas other than the targeted analytes.

3.7 **Repeatability Check.** A protocol for demonstrating that an EC cell operated over a given nominal analyte concentration range provides a stable and consistent response and is not significantly affected by repeated exposure to that gas.

3.8 **Sample Flow Rate.** The flow rate of the gas sample as it passes through the EC cell. In some situations, EC cells can experience drift with changes in flow rate. The flow rate must be monitored and documented during all phases of a sampling run.

3.9 **Sampling Run.** A timed three-phase event whereby an EC cell's response rises and plateaus in a sample conditioning phase, remains relatively constant during a measurement data phase, then declines during a refresh phase. The sample conditioning phase exposes the EC cell to the gas sample for a length of time sufficient to reach a constant response. The measurement data phase is the time interval during which gas sample measurements can be made that meet the acceptance criteria of this protocol. The refresh phase then purges the EC cells with CO-free air. The refresh phase replenishes requisite O₂ and moisture in the electrolyte reserve and provides a mechanism to degas or desorb any interference gas scrubbers or filters so as to enable a stable CO EC cell response. There are four primary types of sampling runs: pre-sampling calibrations; stack gas sampling; post-sampling calibration checks; and measurement system repeatability checks. Stack gas sampling runs can be chained together for extended evaluations, providing all other procedural specifications are met.

3.10 **Sampling Day.** A time not to exceed twelve hours from the time of the pre-sampling calibration to the post-sampling calibration check. During this time, stack gas sampling runs can be repeated without repeated recalibrations, providing all other sampling specifications have been met.

3.11 **Pre-Sampling Calibration/Post-Sampling Calibration Check.** The protocols executed at the beginning and end of each sampling day to bracket measurement readings with controlled performance checks.
3.12 Performance-Established Configuration. The EC cell and sampling system configuration that existed at the time that it initially met the performance requirements of this protocol.

4.0 Interferences.

When present in sufficient concentrations, NO and NO₂ are two gas species that have been reported to interfere with CO concentration measurements. In the likelihood of this occurrence, it is the protocol user's responsibility to employ and properly maintain an appropriate CO EC cell filter or scrubber for removal of these gases, as described in Section 6.2.12.

5.0 Safety. [Reserved]

6.0 Equipment and Supplies.

6.1 What equipment do I need for the measurement system?

The system must maintain the gas sample at conditions that will prevent moisture condensation in the sample transport lines, both before and as the sample gas contacts the EC cells. The essential components of the measurement system are described below.

6.2 Measurement System Components.

6.2.1 Sample Probe. A single extraction-point probe constructed of glass, stainless steel or other non-reactive material, and of length sufficient to reach any designated sampling point. The sample probe must be designed to prevent plugging due to condensation or particulate matter.

6.2.2 Sample Line. Non-reactive tubing to transport the effluent from the sample probe to the EC cell.

6.2.3 Calibration Assembly (optional). A three-way valve assembly or equivalent to introduce calibration gases at ambient pressure at the exit end of the sample probe during calibration checks. The assembly must be designed such that only stack gas or calibration gas flows in the sample line and all gases flow through any gas path filters.

6.2.4 Particulate Filter (optional). Filters before the inlet of the EC cell to prevent accumulation of particulate material in the measurement system and extend the useful life of the components. All filters must be fabricated of materials that are non-reactive to the gas mixtures being sampled.

6.2.5 Sample Pump. A leak-free pump to provide undiluted sample gas to the system at a flow rate sufficient to minimize the response time of the measurement system. If located upstream of the EC cells, the pump must be constructed of a material that is non-reactive to the gas mixtures being sampled.

6.2.8 Sample Flow Rate Monitoring. An adjustable rotameter or equivalent device used to adjust and maintain the sample flow rate through the analyzer as prescribed.

6.2.9 Sample Gas Manifold (optional). A manifold to divert a portion of the sample gas stream to the analyzer and the remainder to a by-pass discharge vent. The sample gas manifold may also include provisions for introducing calibration gases directly to the analyzer. The manifold must be constructed of a material that is non-reactive to the gas mixtures being sampled.

6.2.10 EC cell. A device containing one or more EC cells to determine the CO and O₂ concentrations in the sample gas stream. The EC cell(s) must meet the applicable performance specifications of Section 13 of this protocol.

6.2.11 Data Recorder. A strip chart recorder, computer or digital recorder to make a record of analyzer output data. The data recorder resolution (i.e., readability) must be no greater than 1 ppm for CO; 0.1 percent for O₂; and one degree (either °C or °F) for temperature. Alternatively, you may use a digital or analog meter having the same resolution to observe and manually record the analyzer responses.
6.2.12 Interference Gas Filter or Scrubber. A device to remove interfering compounds upstream of the CO EC cell. Specific interference gas filters or scrubbers used in the performance-established configuration of the analyzer must continue to be used. Such a filter or scrubber must have a means to determine when the removal agent is exhausted. Periodically replace or replenish it in accordance with the manufacturer's recommendations.

7.0 Reagents and Standards. What calibration gases are needed?

7.1 Calibration Gases. CO calibration gases for the EC cell must be CO in nitrogen or CO in a mixture of nitrogen and O₂. Use CO calibration gases with labeled concentration values certified by the manufacturer to be within ±5 percent of the label value. Dry ambient air (20.9 percent O₂) is acceptable for calibration of the O₂ cell. If needed, any lower percentage O₂ calibration gas must be a mixture of O₂ in nitrogen.

7.1.1 Up-Scale CO Calibration Gas Concentration. Choose one or more up-scale gas concentrations such that the average of the stack gas measurements for each stack gas sampling run are between 25 and 150 percent of those concentrations. Alternatively, choose an up-scale gas that does not exceed twice the concentration of the applicable outlet standard. If a measured gas value exceeds 150 percent of the up-scale CO calibration gas value at any time during the stack gas sampling run, the run must be discarded and repeated.

7.1.2 Up-Scale O₂ Calibration Gas Concentration.

Select an O₂ gas concentration such that the difference between the gas concentration and the average stack gas measurement or reading for each sample run is less than 15 percent O₂. When the average exhaust gas O₂ readings are above 6 percent, you may use dry ambient air (20.9 percent O₂) for the up-scale O₂ calibration gas.

7.1.3 Zero Gas. Use an inert gas that contains less than 0.25 percent of the up-scale CO calibration gas concentration. You may use dry air that is free from ambient CO and other combustion gas products (e.g., CO₂).

8.0 Sample Collection and Analysis

8.1 Selection of Sampling Sites.

8.1.1 Control Device Inlet. Select a sampling site sufficiently downstream of the engine so that the combustion gases should be well mixed. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

8.1.2 Exhaust Gas Outlet. Select a sampling site located at least two stack diameters downstream of any disturbance (e.g., turbocharger exhaust, crossover junction or recirculation take-off) and at least one-half stack diameter upstream of the gas discharge to the atmosphere. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

8.2 Stack Gas Collection and Analysis. Prior to the first stack gas sampling run, conduct the pre-sampling calibration in accordance with Section 10.1. Use Figure 1 to record all data. Zero the analyzer with zero gas. Confirm and record that the scrubber media color is correct and not exhausted. Then position the probe at the sampling point and begin the sampling run at the same flow rate used during the up-scale calibration. Record the start time. Record all EC cell output responses and the flow rate during the “sample conditioning phase” once per minute until constant readings are obtained. Then begin the “measurement data phase” and record readings every 15 seconds for at least two minutes (or eight readings), or as otherwise required to achieve two continuous minutes of data that meet the specification given in Section 13.1. Finally, perform the “refresh phase” by introducing dry air, free from CO and other combustion gases, until several minute-to-minute readings of consistent value have been obtained. For each run use the “measurement data phase” readings to calculate the average stack gas CO and O₂ concentrations.

8.3 EC Cell Rate. Maintain the EC cell sample flow rate so that it does not vary by more than ±10 percent throughout the pre-sampling calibration, stack gas sampling and post-sampling calibration check. Alternatively, the EC cell sample flow rate can be maintained within a tolerance range that does not affect the gas concentration readings by more than ±3 percent, as instructed by the EC cell manufacturer.

9.0 Quality Control (Reserved)
10.0 Calibration and Standardization

10.1 Pre-Sampling Calibration. Conduct the following protocol once for each nominal range to be used on each EC cell before performing a stack gas sampling run on each field sampling day. Repeat the calibration if you replace an EC cell before completing all of the sampling runs. There is no prescribed order for calibration of the EC cells; however, each cell must complete the measurement data phase during calibration. Assemble the measurement system by following the manufacturer's recommended protocols including for preparing and preconditioning the EC cell. Assure the measurement system has no leaks and verify the gas scrubbing agent is not depleted. Use Figure 1 to record all data.

10.1.1 Zero Calibration. For both the O2 and CO cells, introduce zero gas to the measurement system (e.g., at the calibration assembly) and record the concentration reading every minute until readings are constant for at least two consecutive minutes. Include the time and sample flow rate. Repeat the steps in this section at least once to verify the zero calibration for each component gas.

10.1.2 Zero Calibration Tolerance. For each zero gas introduction, the zero level output must be less than or equal to ±3 percent of the up-scale gas value or ±1 ppm, whichever is less restrictive, for the CO channel and less than or equal to ±0.3 percent O2 for the O2 channel.

10.1.3 Up-Scale Calibration. Individually introduce each calibration gas to the measurement system (e.g., at the calibration assembly) and record the start time. Record all EC cell output responses and the flow rate during this “sample conditioning phase” once per minute until readings are constant for at least two minutes. Then begin the “measurement data phase” and record readings every 15 seconds for a total of two minutes, or as otherwise required. Finally, perform the “refresh phase” by introducing dry air, free from CO and other combustion gases, until readings are constant for at least two consecutive minutes. Then repeat the steps in this section at least once to verify the calibration for each component gas. Introduce all gases to flow through the entire sample handling system (i.e., at the exit end of the sampling probe or the calibration assembly).

10.1.4 Up-Scale Calibration Error. The mean of the difference of the “measurement data phase” readings from the reported standard gas value must be less than or equal to ±5 percent or ±1 ppm for CO or ±0.5 percent O2, whichever is less restrictive, respectively. The maximum allowable deviation from the mean measured value of any single “measurement data phase” reading must be less than or equal to ±2 percent or ±1 ppm for CO or ±0.5 percent O2, whichever is less restrictive, respectively.

10.2 Post-Sampling Calibration Check. Conduct a stack gas post-sampling calibration check after the stack gas sampling run or set of runs and within 12 hours of the initial calibration. Conduct up-scale and zero calibration checks using the protocol in Section 10.1. Make no changes to the sampling system or EC cell calibration until all post-sampling calibration checks have been recorded. If either the zero or up-scale calibration error exceeds the respective specification in Sections 10.1.2 and 10.1.4 then all measurement data collected since the previous successful calibrations are invalid and re-calibration and re-sampling are required. If the sampling system is disassembled or the EC cell calibration is adjusted, repeat the calibration check before conducting the next analyzer sampling run.

11.0 Analytical Procedure

The analytical procedure is fully discussed in Section 8.

12.0 Calculations and Data Analysis

Determine the CO and O2 concentrations for each stack gas sampling run by calculating the mean gas concentrations of the data recorded during the “measurement data phase”.

13.0 Protocol Performance

Use the following protocols to verify consistent analyzer performance during each field sampling day.

13.1 Measurement Data Phase Performance Check. Calculate the mean of the readings from the “measurement data phase”. The maximum allowable deviation from the mean for each of the individual readings is ±2 percent, or ±1 ppm,
whichever is less restrictive. Record the mean value and maximum deviation for each gas monitored. Data must conform to Section 10.1.4. The EC cell flow rate must conform to the specification in Section 8.3.

Example: A measurement data phase is invalid if the maximum deviation of any single reading comprising that mean is greater than ±2 percent or ±1 ppm (the default criteria). For example, if the mean = 30 ppm, single readings of below 29 ppm and above 31 ppm are disallowed).

13.2 Interference Check. Before the initial use of the EC cell and interference gas scrubber in the field, and semi-annually thereafter, challenge the interference gas scrubber with NO and NO2 gas standards that are generally recognized as representative of diesel-fueled engine NO and NO2 emission values. Record the responses displayed by the CO EC cell and other pertinent data on Figure 1 or a similar form.

13.2.1 Interference Response. The combined NO and NO2 interference response should be less than or equal to ±5 percent of the up-scale CO calibration gas concentration.

13.3 Repeatability Check. Conduct the following check once for each nominal range that is to be used on the CO EC cell within 5 days prior to each field sampling program. If a field sampling program lasts longer than 5 days, repeat this check every 5 days. Immediately repeat the check if the EC cell is replaced or if the EC cell is exposed to gas concentrations greater than 150 percent of the highest up-scale gas concentration.

13.3.1 Repeatability Check Procedure. Perform a complete EC cell sampling run (all three phases) by introducing the CO calibration gas to the measurement system and record the response. Follow Section 10.1.3. Use Figure 1 to record all data. Repeat the run three times for a total of four complete runs. During the four repeatability check runs, do not adjust the system except where necessary to achieve the correct calibration gas flow rate at the analyzer.

13.3.2 Repeatability Check Calculations. Determine the highest and lowest average “measurement data phase” CO concentrations from the four repeatability check runs and record the results on Figure 1 or a similar form. The absolute value of the difference between the maximum and minimum average values recorded must not vary more than ±3 percent or ±1 ppm of the up-scale gas value, whichever is less restrictive.

14.0 Pollution Prevention (Reserved)

15.0 Waste Management (Reserved)

16.0 Alternative Procedures (Reserved)

17.0 References


Table 1: Appendix A—Sampling Run Data.

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<thead>
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<th>Run Type:</th>
<th>Facility</th>
<th>Engine I.D.</th>
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<tbody>
<tr>
<td>(X)</td>
<td>Pre-Sample Calibration</td>
<td>Stack Gas Sample</td>
<td>Post-Sample Cal. Check</td>
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<td>Run #</td>
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<td>2</td>
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<tr>
<td>Gas</td>
<td>O₂</td>
<td>CO</td>
<td>O₂</td>
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<td></td>
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<td>Measurement Data Phase</td>
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<td></td>
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<tr>
<td>Mean</td>
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<td></td>
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<td>Refresh Phase</td>
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[78 FR 6721, Jan. 30, 2013]
Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Description and Location

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<tr>
<th>Source Name:</th>
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<td>Source Location:</td>
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<td>County:</td>
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<tr>
<td>SIC Code:</td>
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<tr>
<td>Permit Renewal No.:</td>
<td>T067-41599-00065</td>
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<td>Permit Reviewer:</td>
<td>Deena Levering</td>
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On June 24, 2019, FCA US LLC - Kokomo Casting Plant submitted an application to the Office of Air Quality (OAQ) requesting to renew its operating permit. OAQ has reviewed the operating permit renewal application from FCA US LLC - Kokomo Casting Plant relating to the operation of a stationary aluminum die casting plant. FCA US LLC - Kokomo Casting Plant was issued its second Part 70 Operating Permit Renewal (T067-32951-00065) on March 27, 2015.

Source Definition

This source consists of two (2) plants:

(a) FCA US LLC - Kokomo Casting Plant (KCP) is located at 1001 East Boulevard, Kokomo, Indiana 46904. This plant is a stationary aluminum die cast plant (SIC Code 3363).

(b) FCA US LLC - Kokomo Transmission Plant (KTP) is located at 2401 S. Reed Road, Kokomo, Indiana 46904. This plant consists of machining, cleaning, and heat treating facilities to produce transmissions for use in automobiles and light duty trucks (Source ID 067-00078 and SIC Code 3714).

These plants are considered a single source. The Kokomo Casting Plant was issued Part 70 Operating Permit Renewal No. T067-25272-00065 on January 5, 2009. The Kokomo Transmission Plant was issued Part 70 Operating Permit Renewal No. T067-18292-00065 on January 16, 2009. These two plants previously operated under a single source ID of 067-00065. The Kokomo Casting Plant remains operating under the source ID of 067-00065, while the Kokomo Transmission Plant now operates under the source ID of 067-00078. The two plants are still considered one source, but are operating under different source IDs. The Kokomo Transmission Plant is being issued the primary Part 70 Operating Permit and the Kokomo Casting Plant is being issued an Administrative Part 70 Operating Permit.

This determination was initially made under Title V Renewal No. 067-32951-00065, issued on March 27, 2015.

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. T067-32951-00065 on March 27, 2015. The source has since received the following approval:


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

The source consists of the following permitted emission units:

| (a) | One (1) natural gas-fired aluminum stack melting furnace, identified as SM3, constructed in 2008, with a maximum melt/remelt capacity of 4.4 tons per hour, with a maximum heat input capacity of 10.93 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 3SM. |
| (b) | One (1) natural gas-fired aluminum stack melting furnace, identified as SM5, constructed in 2008, reconstructed in 2017, with a maximum melt/remelt capacity of 4.4 tons per hour, with a maximum heat input capacity of 10.93 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 5SM. |
| (c) | One (1) natural gas-fired aluminum reverberatory furnace, identified as 2RF, constructed in 1984, with a maximum remelt capacity of 6.5 tons per hour, with a maximum flux usage of 100 pounds per day, with a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled, and exhausting to stacks 2RF and 2RCW. |
| (d) | One (1) natural gas-fired aluminum reverberatory furnace, identified as 4RF, constructed in 1998, with a maximum remelt capacity of 6.5 tons of scrap metal per hour, with a maximum flux usage of 100 pounds per day, with a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled, and exhausting to stacks 4RF and 4RCW. |
| (e) | One (1) natural gas-fired aluminum reverberatory furnace, identified as 6RF, constructed in 1983, with a maximum remelt capacity of 6.5 tons per hour, with a maximum flux usage of 100 pounds per day, with a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled, and exhausting to stacks 6RF and 5RCW. |
| (f) | One (1) natural gas-fired aluminum reverberatory furnace, identified as 7RF, constructed in 1995, with no remelt capability and a maximum average throughput of ten (10) tons per hour and a maximum flux capacity of 82.2 pounds per day (combined with furnace 8RF), with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 7RF. |
| (g) | One (1) natural gas-fired aluminum reverberatory furnace, identified as 8RF, constructed in 1995, with no remelt capability and a maximum average throughput of ten (10) tons per hour and a maximum flux capacity of 82.2 pounds per day (combined with furnace 7RF), with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 8RF. |
| (h) | One (1) natural gas-fired aluminum reverberatory furnace, identified as 9RF, constructed in 1998, with no remelt capability and a maximum average throughput of ten (10) tons per hour and a maximum flux capacity of 115 pounds per day (combined with furnace 10RF), with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 9RF. |
| (i) | One (1) natural gas-fired aluminum reverberatory furnace, identified as 10RF, constructed in 1998, with no remelt capability and a maximum average throughput of ten (10) tons per hour and a maximum flux capacity of 115 pounds per day (combined with furnace 9RF), with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 10RF. |
| (j) | One (1) Tumbleblast shotblast machine, identified as DC5, constructed in 2000, with a maximum shotblast rate of 40,000 pounds per hour (20 tons per hour), and with emissions controlled by cartridge filter, and exhausting to a stack. |
(k) One (1) Wire Mesh machine used for deburring of parts, identified as DC7, constructed in 2005, with a maximum shotblast rate of 174,760 pounds per hour (87.38 tons per hour), and with emissions controlled by a cartridge filter, and exhausting to a stack.

(l) One (1) Wire Mesh machine used for deburring of parts, identified as DC8, constructed in 2005, with a maximum shotblast rate of 174,760 pounds per hour (87.38 tons per hour), with emissions controlled by a cartridge filter approved for modification in 2012, and exhausting to Stack DC8.

(m) One (1) Wheelabrator rotary shotblast unit, identified as DC-10, permitted in 2013, with a maximum shotblast rate of 135,000 pounds per hour, and with particulate emissions controlled by cartridge filters, and exhausting to a stack.

Emission Units and Pollution Control Equipment Removed From the Source

The source has removed the following emission units:

(a) One (1) Mesh Belt shotblast machine, identified as DC2, constructed in 1997, with a maximum shotblast rate of 168,000 pounds per hour (84 tons per hour), and with emissions controlled by a cartridge filter.

(b) One (1) Wire Mesh machine used for deburring of parts, identified as DC4, constructed in 1999, with a maximum shotblast rate of 174,760 pounds per hour (87.38 tons per hour), and with emissions controlled by a cartridge filter.

(c) One (1) Wheelabrator rotary table work machine used for deburring of parts, identified as DC9, permitted in 2010, with a maximum shotblast rate of 135,000 pounds per hour, and using a cartridge filter as control.

(d) One (1) Wheelabrator rotary shotblast unit, identified as DC-11, permitted in 2013, with a maximum shotblast rate of 135,000 pounds per hour, and with particulate emissions controlled by cartridge filters.

(e) One (1) natural gas-fired boiler, identified as 2BLR, constructed in 1964, with a maximum heat input capacity of 81.26 million British thermal units per hour, with emissions uncontrolled, and exhausting to stack 2SB.

(f) One (1) natural gas-fired boiler, identified as 3BLR, constructed in 2000, with a maximum heat input capacity of 77.9 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 3SB.

Under 40 CFR 60, Subpart Dc, Boiler 3BLR is considered an affected facility.

(g) One (1) diesel fired emergency generator, identified as 6WN1-UP, installed in 1999, with a site rating of 1,160 HP.

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

Insignificant Activities

The source also consists of the following insignificant activities:

(a) Ninety-five (95) Die casting machines, identified as DCAST1, with a maximum throughput of 0.31 gallons of die lube per hour per unit, and 0.14 gallons of tip lube per hour per unit, with emissions uncontrolled and exhausting internally.

(b) Trim machines, for removing gates, runners, flash and other large pieces of excess aluminum from the die casting process, with no emissions.
(c) Machining where an aqueous cutting coolant continuously floods the machining interface.

(d) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment.

(e) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.

(f) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; woodworking operations; tooling operations including dry grinding/sanding/cutting stations wet grinding stations using a maximum of 0.09 gallons of cutting oil per hour, with emissions controlled by a baghouse and exhausting internally.

(g) One (1) diesel fired emergency generator, identified as 450R071, installed in 1989, with a site rating of 900 HP.

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

(h) Seven (7) dry deburring systems, identified as Dry Deburr 1 - 7, permitted in 2013, each with one (1) station for handling parts, one (1) station for drilling and tapping parts, and four (4) stations for processing parts through milling and brushing heads, with emissions uncontrolled, and exhausting within the plant.

(i) Waste water treatment plant operations, with a maximum treatment capacity of 150,000 gallons per day, with emissions uncontrolled.

(j) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, including:

(1) Three (3) natural gas fired heat treat furnaces, permitted in 2010, each with a maximum heat input capacity of 0.8 MMBtu/hr.

(2) One (1) natural gas fired heat treat furnace, installed in 2011, with a maximum heat input capacity of 0.8 MMBtu/hr.

(3) Twenty-six (26) natural gas fired air make-up units, with a total heat input capacity of 74.4 MMBtu/hr.

(k) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu per hour.

Note: These units are portable generators and engines that are considered nonroad engines. Therefore, the potential to emit of these units are not counted toward the permit level determination and these units are not subject to 40 CFR 60, Subpart III, 40 CFR 60, Subpart JJJJ, or 40 CFR 63, Subpart ZZZZ.

(l) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(m) Refractory storage not requiring air pollution control equipment.

(n) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
Cleaners and solvents characterized as follows:

(o) having a vapor pressure equal to or less than 2 kilopascals; 15 mm Hg; or 0.3 psi measured at 38 C (100 F); or

(2) having a vapor pressure equal to or less than 0.7 kilopascal; 5 mm Hg; or 0.1 psi measured at 20 C (68 F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months;

Note: All cold cleaners use aqueous based products with VOC contents of zero.

Closed loop heating and cooling systems.

Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.

Noncontact cooling tower systems with natural draft cooling towers not regulated under a NESHAP.

Noncontact cooling tower systems with forced and induced draft cooling tower systems not regulated under a NESHAP.

Quenching operations used with heat treating processes.

Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

Heat exchanger cleaning and repair.

Paved and unpaved roads and parking lots with public access.

Asbestos abatement projects regulated by 326 IAC 14-10.

Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

A laboratory as defined in 326 IAC 2-7-1(21)(D).

RWD Deburring units, used to trim large pieces of metal from parts, resulting in no PM emissions.

Six (6) enclosed Haas Deburring Units, used to trim large pieces of metal from parts, resulting in no PM emissions.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.
County Attainment Status

The source is located in Howard County.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO₂</td>
<td>Better than national standards.</td>
</tr>
<tr>
<td>CO</td>
<td>Unclassifiable or attainment effective November 15, 1990.</td>
</tr>
<tr>
<td>O₃</td>
<td>Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.¹</td>
</tr>
<tr>
<td>PM₂.₅</td>
<td>Unclassifiable or attainment effective April 15, 2015, for the 2012 annual PM₂.₅ standard.</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>Unclassifiable effective November 15, 1990.</td>
</tr>
<tr>
<td>NO₂</td>
<td>Unclassifiable or attainment effective January 29, 2012, for the 2010 NO₂ standard.</td>
</tr>
<tr>
<td>Pb</td>
<td>Unclassifiable or attainment effective December 31, 2011, for the 2008 lead standard.</td>
</tr>
</tbody>
</table>

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

(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. Howard 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) PM₂.₅
Howard County has been classified as attainment for PM₂.₅. Therefore, direct PM₂.₅, SO₂, and NOₓ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Howard County has been classified as attainment or unclassifiable in Indiana for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

This source consists of a stationary aluminum die casting plant at the Kokomo Casting Plant and a stationary plant for producing transmissions for use in automobiles and light duty trucks at the contiguous Kokomo Transmission Plant. It also includes fossil fuel-fired steam boilers with a combined capacity of more than two hundred fifty million (250,000,000) British thermal units per hour of heat input.

(1) The die casting plant at the Kokomo Casting Plant is not considered a secondary metal production plant (one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7) because the Permittee shall melt only clean charge, customer returns, or internal scrap. Therefore, the fugitive emissions from the die casting plant are not counted towards determination of PSD, Emission Offset, and Part 70 Permit applicability, except as provided in (3) below.

(2) The transmission production plant at the Kokomo Transmission Plant is not considered one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. Therefore, the fugitive emissions from the transmission plant are not counted towards determination of PSD, Emission Offset, and Part 70 Permit applicability, except as provided in (3) below.
(3) The fossil fuel-fired steam boilers with a total heat input rating of greater than 250 MMBtu/hr are considered one of the twenty-eight (28) source categories, based on the EPA guidance for "nested activities". Therefore, any fugitive emissions from these boilers are counted towards PSD, Emission Offset, and Part 70 Permit applicability.

(4) Boilers 6 and 7 at the Kokomo Transmission Plant are subject to 40 CFR 60, Subpart Dc (NSPS for Small Industrial-Commercial-Institutional Steam Generating Units). This New Source Performance Standard was in effect after August 7, 1980. However, based on (3) above, any fugitive emissions from the boilers are counted towards PSD, Emission Offset, and Part 70 Permit applicability.

The fugitive emissions of hazardous air pollutants (HAP) are counted toward the determination of Part 70 Permit applicability and source status under Section 112 of the Clean Air Act (CAA).

**Greenhouse Gas (GHG) Emissions**

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at [http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf](http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf)) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court’s decision. U.S. EPA’s guidance states that U.S. EPA will no longer require PSD or Title V permits for sources “previously classified as ‘Major’ based solely on greenhouse gas emissions.”

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

**Unrestricted Potential Emissions**

This table reflects the unrestricted potential emissions of the source.

<table>
<thead>
<tr>
<th>Unrestricted Potential Emissions (ton/year)</th>
<th>PM(^1)</th>
<th>PM(_{10})(^1)</th>
<th>PM(_{2.5})(^1,2)</th>
<th>SO(_2)</th>
<th>NO(_X)</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP(^3)</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PTE of Entire Source Excluding Fugitive Emissions (KCP)*</td>
<td>666.77</td>
<td>670.01</td>
<td>670.01</td>
<td>1.42</td>
<td>91.05</td>
<td>9.88</td>
<td>73.18</td>
<td>4.90</td>
<td>13.54</td>
</tr>
<tr>
<td>Total Emissions at KTP**</td>
<td>1429.6</td>
<td>1425.6</td>
<td>1406.5</td>
<td>1059.7</td>
<td>459.5</td>
<td>132.0</td>
<td>250.4</td>
<td>5.76</td>
<td>18.52</td>
</tr>
<tr>
<td>Total PTE of Entire Source (KCP + KTP)</td>
<td>2096.37</td>
<td>2095.61</td>
<td>2076.51</td>
<td>1061.12</td>
<td>550.55</td>
<td>141.88</td>
<td>323.58</td>
<td>10.66</td>
<td>32.06</td>
</tr>
<tr>
<td>Title V Major Source Thresholds</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>10</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>PSD Major Source Thresholds</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Under the Part 70 Permit program (40 CFR 70), PM\(_{10}\) and PM\(_{2.5}\), not particulate matter (PM), are each considered as a “regulated air pollutant.”

\(^2\)PM\(_{2.5}\) listed is direct PM\(_{2.5}\).

\(^3\)Single highest source-wide HAP

Fugitive HAP emissions are always included in the source-wide emissions.

**KTP = Kokomo Transmission Plant emissions retrieved from 067-39222-00078.**
Appendix A of this TSD reflects the detailed unrestricted potential emissions of the source.

(a) The potential to emit (as defined in 326 IAC 2-7-1(30)) of PM10 PM2.5 SO2 NOx VOC CO are equal to or greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.

(b) The potential to emit (as defined in 326 IAC 2-7-1(30)) of any single HAP is equal to or greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(30)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. The source will be issued a Part 70 Operating Permit Renewal.

**Part 70 Permit Conditions**

This source is subject to the requirements of 326 IAC 2-7, because the source met the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

**Potential to Emit After Issuance**

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

<table>
<thead>
<tr>
<th>Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)</th>
<th>PM(^1)</th>
<th>PM(_{10})(^1)</th>
<th>PM(_{2.5})(^{1, 2})</th>
<th>SO(_2)</th>
<th>NO(_X)</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP(^3)</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PTE of Entire Source Excluding Fugitive Emissions (KCP)*</td>
<td>272.3</td>
<td>155.4</td>
<td>497.3</td>
<td>1.53</td>
<td>108.2</td>
<td>10.8</td>
<td>87.6</td>
<td>1.54</td>
<td>4.06</td>
</tr>
<tr>
<td>Total Emissions at KTP**</td>
<td>275.6</td>
<td>270.9</td>
<td>168.2</td>
<td>658.9</td>
<td>396.7</td>
<td>132.0</td>
<td>253.0</td>
<td>3.47</td>
<td>10.46</td>
</tr>
<tr>
<td>Total PTE of Entire Source (KCP + KTP)</td>
<td>547.9</td>
<td>426.3</td>
<td>665.5</td>
<td>660.4</td>
<td>504.9</td>
<td>142.8</td>
<td>340.6</td>
<td>5.01</td>
<td>14.52</td>
</tr>
<tr>
<td>Title V Major Source Thresholds</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>PSD Major Source Thresholds</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

\(^1\)Under the Part 70 Permit program (40 CFR 70), PM\(_{10}\) and PM\(_{2.5}\), not particulate matter (PM), are each considered as a "regulated air pollutant."

\(^2\)PM\(_{2.5}\) listed is direct PM\(_{2.5}\).

\(^3\)Single highest source-wide HAP.

\(*\)Fugitive HAP emissions are always included in the source-wide emissions.

\(**\)KTP = Kokomo Transmission Plant emissions retrieved from 067-39222-00078.

Appendix A of this TSD reflects the detailed potential to emit of the entire source after issuance.

The source opted to take limit(s) in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to this source and to render the source an area source of HAP emissions under Section 112 of the Clean Air Act (CAA). See Technical Support Document (TSD)
State Rule Applicability - Entire Source section, 326 IAC 2-8 (FESOP), 326 IAC 2-2 (PSD), and 326 IAC 20 (Hazardous Air Pollutants) for more information regarding the limit(s).

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a PSD regulated pollutant, PM PM10 PM2.5 SO2 NOx CO, are 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(ff)(1).

(b) This source is not a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions are 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).

Federal Rule Applicability

Federal rule applicability for this source has been reviewed as follows:

**New Source Performance Standards (NSPS):**

(a) The requirements of the New Source Performance Standard for Primary Aluminum Reduction Plants 40 CFR 60, Subpart S and 326 IAC 12, are not included in the permit for this source, because the source does not meet the definition of a primary aluminum reduction plant since it does not manufacture aluminum.

(b) The requirements of the New Source Performance Standard for Stationary Compression Ignition Internal Combustion Engines 40 CFR 60, Subpart IIII and 326 IAC 12, are not included in the permit for the diesel fired emergency generator (450R071) and the portable generators. The emergency generator (450R071) was constructed prior to the applicability date of July 11, 2005 and the portable generators are considered nonroad engines pursuant to 40 CFR 60.4219, the definition of stationary internal combustion engine does not include nonroad engines.

(c) The requirements of the New Source Performance Standard for Stationary Spark Ignition Internal Combustion Engines 40 CFR 60, Subpart JJJJ and 326 IAC 12, are not included in the permit for the portable generators, because they are considered nonroad engines pursuant to 40 CFR 60.4219, the definition of stationary internal combustion engine does not include nonroad engines.

(d) There are no New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included in the permit.

**National Emission Standards for Hazardous Air Pollutants (NESHAP):**

(a) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Halogenated Solvent Cleaning 40 CFR 63, Subpart T and 326 IAC 20-6 are not included in the permit for cleaning operation, since the solvents used do not contain halogenated HAPs.

(b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Primary Aluminum Reduction Plants 40 CFR 63, Subpart LL and 326 IAC 20-24 are not included in the permit for this source, since the source does not meet the definition of a primary aluminum reduction plant. This source does not manufacture aluminum.

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Secondary Aluminum Production 40 CFR 63, Subpart RRR and 326 IAC 20-70 are not included in the permit for this source, since this source is not considered a secondary aluminum production facility pursuant to 40 CFR 63.1503. The source only melts clean charge, customer returns, or internal scrap, and the source does not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decorating kilns.
Under 40 CFR 63.1503 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”.

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Stationary Reciprocating Internal Combustion Engines 40 CFR 63, Subpart ZZZZ and 326 IAC 20-82 are not included in the permit for the portable generators and engines, since these units are nonroad engines and pursuant to 40 CFR 63.6675, the definition of stationary reciprocating internal combustion engine does not include nonroad engines.

(e) The diesel emergency generator (450R071) (900 HP) are subject the requirements of the 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (326 IAC 20-82), because it is considered an existing stationary reciprocating internal combustion engine (RICE) (construction commenced before June 12, 2006) at an area source of hazardous air pollutants (HAP). Construction of the diesel emergency generator (450R071) commenced in 1989.

The diesel emergency generator (450R071) are subject the following applicable portions of the NESHAP for existing emergency stationary RICE (construction commenced before June 12, 2006) at an area source of HAP:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585
(3) 40 CFR 63.6590(a)(1)(iii) and (iv)
(4) 40 CFR 63.6595(a)(1), (b), and (c)
(5) 40 CFR 63.6603(a)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6625(e)(3), (f), (h), and (i)
(8) 40 CFR 63.6640(a), (b), (e), (f)(1), (f)(2)(i), and (f)(4)
(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

Note: Existing emergency compression ignition (CI) stationary RICE located at an area source of HAP are not subject to numerical CO or formaldehyde emission limitations, but are only subject to work and management practices under Table 2d and Table 6.

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the source except as otherwise specified in 40 CFR 63, Subpart ZZZZ.

Based on this evaluation, this source is subject to 40 CFR 63, Subpart ZZZZ. On May 4, 2016, the U.S. Court of Appeals for the D.C. Circuit issued a mandate vacating paragraphs 40 CFR 63.6640(f)(2)(ii) and (iii) of NESHAP Subpart ZZZZ. Therefore, these paragraphs no longer have any legal effect and any engine that is operated for purposes specified in these paragraphs becomes a non-emergency engine and must comply with all applicable requirements for a non-emergency engine.

For additional information, please refer to the USEPA’s Guidance Memo:
Since the federal rule has not been updated to remove these vacated requirements, the text below shows the vacated language as strikethrough text. At this time, IDEM is not making any changes to the permit’s attachment due to this vacatur. However, the permit will not reference the vacated requirements, as applicable.

40 CFR 63.6640(f)(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Secondary Nonferrous Metals Processing Area Sources 40 CFR 63, Subpart TTTTTT (6T) are not included in the permit for the source, since the source does not meet the definition of a secondary nonferrous metals processing facility pursuant to 40 CFR 63.11472.

(g) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Area Sources Standards for Nine Metal Fabrication and Finishing Source Categories 40 CFR 63, Subpart XXXXXX (6X) are not included in the permit for the source, since the source is not primarily engaged in the operations in one of the nine source categories described in 40 CFR 63, Subpart XXXXXX.

(h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Area Sources Standards for Aluminum, Copper, and Other Nonferrous Foundries 40 CFR 63, Subpart ZZZZZZ (6Z) are not included in the permit for the source, since this source does not meet the definition of an aluminum foundry pursuant to 40 CFR 63.11556. This source conducts die casting.

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.

Compliance Assurance Monitoring (CAM):
(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:

1. has a potential to emit before controls equal to or greater than the major source threshold for the regulated pollutant involved;

2. is subject to an emission limitation or standard for that pollutant (or a surrogate thereof); and

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

(b) Pursuant to 40 CFR 64.2(b)(1)(i), emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act are exempt from the requirements of CAM. Therefore, an evaluation was not conducted for any emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act.

The following table is used to identify the applicability of CAM to each emission unit and each emission limitation or standard for a specified pollutant based on the criteria specified under 40 CFR 64.2:

<table>
<thead>
<tr>
<th>Emission Unit/Pollutant</th>
<th>Control Device</th>
<th>Applicable Emission Limitation</th>
<th>Uncontrolled PTE (tons/year)</th>
<th>Controlled PTE (tons/year)</th>
<th>CAM Applicable (Y/N)</th>
<th>Large Unit (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tumbleblast Shot blast Machine (DC5)/ PM*</td>
<td>CF</td>
<td>326 IAC 6.5</td>
<td>39.42</td>
<td>0.39</td>
<td>N 6</td>
<td>N</td>
</tr>
<tr>
<td>Tumbleblast Shot blast Machine (DC5)/ PM</td>
<td>CF</td>
<td>326 IAC 2-2</td>
<td>39.42</td>
<td>0.39</td>
<td>N 6</td>
<td>N</td>
</tr>
<tr>
<td>Tumbleblast Shot blast Machine (DC5)/ PM10</td>
<td>CF</td>
<td>326 IAC 2-2</td>
<td>39.42</td>
<td>0.39</td>
<td>N 7</td>
<td>N</td>
</tr>
<tr>
<td>Tumbleblast Shot blast Machine (DC5)/ PM2.5</td>
<td>CF</td>
<td>N/A</td>
<td>--</td>
<td>--</td>
<td>N 1</td>
<td>N</td>
</tr>
<tr>
<td>Tumbleblast Shot blast Machine (DC5)/ Cr</td>
<td>CF</td>
<td>40 CFR 63</td>
<td>0.08</td>
<td>0.001</td>
<td>N 2</td>
<td>N</td>
</tr>
<tr>
<td>Tumbleblast Shot blast Machine (DC5)/ Mn</td>
<td>CF</td>
<td>40 CFR 63</td>
<td>0.34</td>
<td>0.003</td>
<td>N 3</td>
<td>N</td>
</tr>
<tr>
<td>Tumbleblast Shot blast Machine (DC5)/ Ni</td>
<td>CF</td>
<td>40 CFR 63</td>
<td>0.03</td>
<td>0.000</td>
<td>N 4</td>
<td>N</td>
</tr>
<tr>
<td>Wire Mesh Machine (DC7)/ PM*</td>
<td>CF</td>
<td>326 IAC 6.5</td>
<td>172.23</td>
<td>1.72</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Wire Mesh Machine (DC7)/ PM</td>
<td>CF</td>
<td>326 IAC 2-2</td>
<td>172.23</td>
<td>1.72</td>
<td>N 5</td>
<td>N</td>
</tr>
<tr>
<td>Wire Mesh Machine (DC7)/ PM10</td>
<td>CF</td>
<td>326 IAC 2-2</td>
<td>172.23</td>
<td>1.72</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Wire Mesh Machine (DC7)/ PM2.5</td>
<td>CF</td>
<td>N/A</td>
<td>--</td>
<td>--</td>
<td>N 1</td>
<td>N</td>
</tr>
<tr>
<td>Wire Mesh Machine (DC7)/ Cr</td>
<td>CF</td>
<td>40 CFR 63</td>
<td>0.36</td>
<td>0.004</td>
<td>N 2</td>
<td>N</td>
</tr>
<tr>
<td>Wire Mesh Machine (DC7)/ Mn</td>
<td>CF</td>
<td>40 CFR 63</td>
<td>1.50</td>
<td>0.015</td>
<td>N 3</td>
<td>N</td>
</tr>
<tr>
<td>Wire Mesh Machine (DC7)/ Ni</td>
<td>CF</td>
<td>40 CFR 63</td>
<td>0.14</td>
<td>0.001</td>
<td>N 4</td>
<td>N</td>
</tr>
<tr>
<td>Wire Mesh Machine (DC8)/ PM*</td>
<td>CF</td>
<td>326 IAC 6.5</td>
<td>172.23</td>
<td>1.72</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Wire Mesh Machine (DC8)/ PM</td>
<td>CF</td>
<td>326 IAC 2-2</td>
<td>172.23</td>
<td>1.72</td>
<td>N 5</td>
<td>N</td>
</tr>
<tr>
<td>Wire Mesh Machine (DC8)/ PM10</td>
<td>CF</td>
<td>326 IAC 2-2</td>
<td>172.23</td>
<td>1.72</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Emission Unit/Pollutant</td>
<td>Control Device</td>
<td>Applicable Emission Limitation</td>
<td>Uncontrolled PTE (tons/year)</td>
<td>Controlled PTE (tons/year)</td>
<td>CAM Applicable (Y/N)</td>
<td>Large Unit (Y/N)</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------</td>
<td>-------------------------------</td>
<td>-----------------------------</td>
<td>--------------------------</td>
<td>----------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Wire Mesh Machine (DC8)/PM2.5</td>
<td>CF</td>
<td>N/A</td>
<td>--</td>
<td>--</td>
<td>N¹</td>
<td>N</td>
</tr>
<tr>
<td>Wire Mesh Machine (DC8)/Cr</td>
<td>CF</td>
<td>40 CFR 63</td>
<td>0.36</td>
<td>0.004</td>
<td>N²</td>
<td>N</td>
</tr>
<tr>
<td>Wire Mesh Machine (DC8)/Mn</td>
<td>CF</td>
<td>40 CFR 63</td>
<td>1.50</td>
<td>0.015</td>
<td>N³</td>
<td>N</td>
</tr>
<tr>
<td>Wire Mesh Machine (DC8)/Ni</td>
<td>CF</td>
<td>40 CFR 63</td>
<td>0.14</td>
<td>0.001</td>
<td>N⁴</td>
<td>N</td>
</tr>
<tr>
<td>Wheelabrator Rotary Shot blast Unit (DC10)/PM*</td>
<td>CF</td>
<td>326 IAC 6.5</td>
<td>133.04</td>
<td>1.33</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Wheelabrator Rotary Shot blast Unit (DC10)/PM</td>
<td>CF</td>
<td>326 IAC 2-2</td>
<td>133.04</td>
<td>1.33</td>
<td>N⁵</td>
<td>N</td>
</tr>
<tr>
<td>Wheelabrator Rotary Shot blast Unit (DC10)/PM10</td>
<td>CF</td>
<td>326 IAC 2-2</td>
<td>133.04</td>
<td>1.33</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Wheelabrator Rotary Shot blast Unit (DC10)/PM2.5</td>
<td>CF</td>
<td>326 IAC 2-2</td>
<td>133.04</td>
<td>1.33</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Wheelabrator Rotary Shot blast Unit (DC10)/Cr</td>
<td>CF</td>
<td>40 CFR 63</td>
<td>0.28</td>
<td>0.003</td>
<td>N²</td>
<td>N</td>
</tr>
<tr>
<td>Wheelabrator Rotary Shot blast Unit (DC10)/Mn</td>
<td>CF</td>
<td>40 CFR 63</td>
<td>1.16</td>
<td>0.012</td>
<td>N³</td>
<td>N</td>
</tr>
<tr>
<td>Wheelabrator Rotary Shot blast Unit (DC10)/Ni</td>
<td>CF</td>
<td>40 CFR 63</td>
<td>0.11</td>
<td>0.001</td>
<td>N⁴</td>
<td>N</td>
</tr>
</tbody>
</table>

Uncontrolled PTE (tpy) and controlled PTE (tpy) are evaluated against the Major Source Threshold for each pollutant. Major Source Threshold for criteria pollutants (PM10, PM2.5, SO2, NOX, VOC and CO) is 100 tpy, for a single HAP ten (10) tpy, and for total HAPs twenty-five (25) tpy.

Under the Part 70 Permit program (40 CFR 70), PM is not a regulated pollutant.

PM* For limitations under 326 IAC 6-3-2, 326 IAC 6.5, and 326 IAC 6.8, IDEM OAQ uses PM as a surrogate for the regulated air pollutant PM10. Therefore, uncontrolled PTE and controlled PTE reflect the emissions of the regulated air pollutant PM10.

N¹ CAM does not apply because there is no applicable limitation for this pollutant.

N² CAM does not apply for Chromium (Cr) because the uncontrolled PTE of Chromium (Cr) is less than the major source threshold.

N³ CAM does not apply for Manganese (Mn) because the uncontrolled PTE of Manganese (Mn) is less than the major source threshold.

N⁴ CAM does not apply for Nickel (Ni) because the uncontrolled PTE of Nickel (Ni) is less than the major source threshold.

N⁵ Under 326 IAC 2-2, PM is not a surrogate for a regulated air pollutant. Therefore, CAM does not apply to these emission units for the 326 IAC 2-2 PM limitation.

N⁶ CAM does not apply for PM because the uncontrolled PTE of PM is less than the major source threshold.

N⁷ CAM does not apply for PM10 because the uncontrolled PTE of PM10 is less than the major source threshold.

Controls: BH = Baghouse, C = Cyclone, DC = Dust Collection System, RTO = Regenerative or Recuperative Thermal Oxidizer, WS = Wet Scrubber, ESP = Electrostatic Precipitator, CF = Cartridge Filter

Emission units without air pollution controls are not subject to CAM. Therefore, they are not listed.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are applicable to DC7, and DC8 for PM and PM10. The requirements of 40 CFR Part 64, CAM, is applicable to DC10 for PM, PM10, and PM2.5. A CAM plan was submitted as part of a previous permit application and the Compliance Determination and Monitoring Requirements section includes a detailed description of the CAM requirements.
326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset)
PSD and Emission Offset applicability is discussed under the Potential to Emit After Issuance section of this document.

PSD Minor Source Limits
In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

(1) The total metal melted/remelted to the two (2) furnaces, identified as SM3 and 4RF, shall be less than 50,000 tons per twelve (12) consecutive month period, with compliance determined at the end of the month.

(2) The total PM, PM10, and PM2.5 emissions from the two (2) furnaces, identified as SM3 and 4RF, shall be less than the following:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM (lb/ton of melting or remelting)</th>
<th>PM10 (lb/ton of melting or remelting)</th>
<th>PM2.5 (lb/ton of melting or remelting)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM3</td>
<td>0.525</td>
<td>0.525</td>
<td>0.45</td>
</tr>
<tr>
<td>4RF</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(3) The combined annual flux usage to the two (2) furnaces, identified as SM3 and 4RF, shall be less than 14,000 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month.

(4) During fluxing operations, the total PM, PM10, and PM2.5 emissions from the two (2) furnaces, identified as SM3 and 4RF, shall be less than the following:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM (lb/lb of flux)</th>
<th>PM10 (lb/lb of flux)</th>
<th>PM2.5 (lb/lb of flux)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM3</td>
<td>0.129</td>
<td>0.129</td>
<td>0.11</td>
</tr>
<tr>
<td>4RF</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(5) The total metal melted/remelted to the two (2) furnaces, identified as SM5 and 6RF, shall be less than 54,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(6) The total PM, PM10, and PM2.5 emissions from the two (2) furnaces, identified as SM5 and 6RF, shall be less than the following:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM (lb/ton of melting or remelting)</th>
<th>PM10 (lb/ton of melting or remelting)</th>
<th>PM2.5 (lb/ton of melting or remelting)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM5</td>
<td>0.525</td>
<td>0.525</td>
<td>0.45</td>
</tr>
<tr>
<td>6RF</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(7) The combined annual flux usage to the two (2) furnaces, identified as SM5 and 6RF, shall be less than 14,000 pounds per twelve (12) consecutive month period with compliance determined at the end of the month.

(8) During fluxing operations, the total PM, PM10, and PM2.5 emissions from the two (2) furnaces, identified as SM5 and 6RF, shall be less than the following:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM (lb/lb of flux)</th>
<th>PM10 (lb/lb of flux)</th>
<th>PM2.5 (lb/lb of flux)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM5</td>
<td>0.129</td>
<td>0.129</td>
<td>0.11</td>
</tr>
<tr>
<td>6RF</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Compliance with these limits, combined with the potential to emit PM, PM10, and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM, PM10, and PM2.5 to less than twenty-five (25) tons of PM, fifteen (15) tons of PM10, and ten (10) tons of PM2.5 per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

1995 Modification

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1995 Modification permitted under Registered Construction and Operation Status Permit No. 067-4453-00002, the Permittee shall comply with the following:

(a) The total annual flux usage to the Reverberatory Furnaces, identified as 7RF and 8RF, shall be less than 30,000 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) During fluxing operations, the total PM emissions due to flux usage from the Reverberatory Furnaces, identified as 7RF and 8RF, shall be less than 0.9 lb of PM/lb of flux.

(c) During fluxing operations, the total PM10 emissions due to flux usage from the Reverberatory Furnaces, identified as 7RF and 8RF, shall be less than 0.45 lb of PM10/lb of flux.

Compliance with these limits, shall limit the potential to emit of PM and PM10 to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1995 Modification permitted under Registered Construction and Operation Status Permit No. 067-4453-00002.

1998 Modification

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1998 Modification permitted under Registered Construction and Operation Status Permit No. 067-9188-00002, the Permittee shall comply with the following:

(a) The total annual flux usage to the Reverberatory Furnaces, identified as 9RF and 10RF, shall be less than 41,975 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) During fluxing operations, the total PM emissions due to flux usage from the Reverberatory Furnaces, identified as 9RF and 10RF, shall be less than 0.9 lb of PM/lb of flux.

(c) During fluxing operations, the total PM10 emissions due to flux usage from the Reverberatory Furnaces, identified as 9RF and 10RF, shall be less than 0.45 lb of PM10/lb of flux.

Compliance with these limits, shall limit the potential to emit of PM and PM10 to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1998 Modification permitted under Registered Construction and Operation Status Permit No. 067-9188-00002.
1998 Modification

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 1998 Modification permitted under Interim Registration Approval No. 1067-9855-00002, the Permittee shall comply with the following:

(a) The total metal remelted to the Reverberatory Furnace, identified as 4RF shall be less than 56,940 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) The total PM emissions from the Reverberatory Furnace, identified as 4RF, shall be less than 0.875 lb of PM/ton of metal remelted.

(c) The total PM10 emissions from the Reverberatory Furnace, identified as 4RF shall be less than 0.525 lb of PM10/ton of metal remelted.

Compliance with these limits, shall limit the potential to emit of PM and PM10 to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (PSD) not applicable to the 1998 Modification permitted under Interim Registration Approval No. 1067-9855-00002.

1999 Modification

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the 1999 Modification permitted under SSM No. 067-10648-00065, the Permittee shall comply with the following:

(a) PM emissions from the Tumbleblast shotblast, identified as DC5, shall not exceed 4.64 pounds per hour. Compliance with this limit will limit the PM emissions to less than twenty-five (25) tons per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2000 modification.

(b) PM10 emissions from the Tumbleblast shotblast, identified as DC5, shall not exceed 2.36 pounds per hour. PM10 emissions to less than fifteen (15) tons per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2000 modification.

Compliance with these limits, shall limit the potential to emit of PM and PM10 to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2000 Modification permitted under SSM No. 067-10648-00065.

2005 Modification

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2005 Modification permitted under MSM No. 067-21840-00065, the Permittee shall comply with the following:

(a) PM and PM10 emissions from DC7 and DC8 shall not exceed the limits in the table below:

<table>
<thead>
<tr>
<th>Unit</th>
<th>PM Limit (lb/hr)</th>
<th>PM10 Limit (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC7: Wire Mesh Machine</td>
<td>2.85</td>
<td>1.71</td>
</tr>
<tr>
<td>DC8: Wire Mesh Machine</td>
<td>2.85</td>
<td>1.71</td>
</tr>
</tbody>
</table>

Compliance with these limits, shall limit the potential to emit of PM and PM10 to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2005 Modification permitted under MSM No. 067-21840-00065.
2013 Modification

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2013 Modification permitted under SSM No. 067-33120-00065, the Permittee shall comply with the following:

(a) PM, PM10, and PM2.5 emissions from the shot blast unit (DC-10) shall not exceed the limits in the table below:

<table>
<thead>
<tr>
<th>Unit</th>
<th>PM Limit (lb/hr)</th>
<th>PM10 Limit (lb/hr)</th>
<th>PM2.5 Limit (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shot Blast Unit (DC-10)</td>
<td>0.304</td>
<td>0.304</td>
<td>0.304</td>
</tr>
</tbody>
</table>

Compliance with these limits, shall limit the potential to emit of PM, PM10, and PM2.5 to less than twenty-five (25) tons of PM, fifteen (15) tons of PM10, and ten (10) tons of PM2.5 per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2013 Modification permitted under SSM No. 067-33120-00065.

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

The provisions of 326 IAC 2-4.1 apply to any owner or operator who constructs or reconstructs a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.41, after July 27, 1997, unless the major source has been specifically regulated under or exempted from regulation under a NESHAP that was issued pursuant to Section 112(d), 112(h), or 112(j) of the Clean Air Act (CAA) and incorporated under 40 CFR 63. On and after June 29, 1998, 326 IAC 2-4.1 is intended to implement the requirements of Section 112(g)(2)(B) of the Clean Air Act (CAA).

The operation of this source will emit 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)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of PM10 is greater than 250 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(1), annual reporting is required. An emission statement shall be submitted in accordance with the compliance schedule in 326 IAC 2-6-3 and every year thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 2-7-6(5) (Annual Compliance Certification)

The U.S. EPA Federal Register 79 FR 54978 notice does not exempt Title V Permittees from the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D), but the submittal of the Title V annual compliance certification to IDEM satisfies the requirement to submit the Title V annual compliance certifications to EPA. IDEM does not intend to revise any permits since the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D) still apply, but Permittees can note on their Title V annual compliance certifications that submission to IDEM has satisfied reporting to EPA per Federal Register 79 FR 54978. This only applies to Title V Permittees and Title V compliance certifications.

326 IAC 5-1 (Opacity Limitations)

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

326 IAC 6-4 (Fugitive Dust Emissions Limitations)

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

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

This source is not subject to the requirements of 326 IAC 6-5, because the source has potential fugitive particulate emissions of less than twenty-five (25) tons per year.
326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
This source (located in Howard County) is located in one of the counties listed in 326 IAC 6.5 and it is one of the sources specifically listed in 326 IAC 6.5-5-2. Therefore, the facilities specifically identified in 326 IAC 6.5-5-2 are subject to the requirements of 326 IAC 6.5-5-2. All other facilities not specifically identified in 326 IAC 6.5-5-2 have a combined PTE of PM of 10 tons per year or more; therefore, the actual emissions of PM from these facilities can exceed 10 tons per year. Therefore, all other facilities not specifically identified in 326 IAC 6.5-5-2 are subject to the requirements of 326 IAC 6.5-1-2 because these facilities can have a combined actual emissions of PM of 10 tons per year or more.

326 IAC 6.8 (Particulate Matter Limitations for Lake County)
Pursuant to 326 IAC 6.8-1-1(a), this source (located in Howard County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.

326 IAC 20 (Hazardous Air Pollutants)
(1) In order to render the source an area source of HAP emissions under Section 112 of the Clean Air Act (CAA), the Permittee shall comply with the following:

   (a) The metallic HAP content of the metals introduced into the stack melting and reverberatory furnaces, identified as SM3, SM5, and 2RF, 4RF, 6RF, through 10RF, shall not exceed one percent (1.0%) by weight.

   (b) Particulate emissions from the stack melting and reverberatory furnaces shall not exceed the following:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM Limit</th>
<th>PM Limit Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM3 and 4RF</td>
<td>0.525</td>
<td>lb per ton of melting or remelting</td>
</tr>
<tr>
<td>2RF</td>
<td>0.391</td>
<td>lb per ton of melting or remelting</td>
</tr>
<tr>
<td>SM5 and 6RF</td>
<td>0.525</td>
<td>lb per ton of melting or remelting</td>
</tr>
<tr>
<td>7RF and 8RF</td>
<td>0.129</td>
<td>lb per lb of flux</td>
</tr>
<tr>
<td>9RF and 10 RF</td>
<td>0.129</td>
<td>lb per lb of flux</td>
</tr>
</tbody>
</table>

Compliance with these limits, combined with the potential to emit HAP from all other emission units at the source, shall limit the source-wide potential to emit single HAP to less than 10 tons per twelve (12) consecutive month period and the source-wide potential to emit total HAPs to less than 25 tons per twelve (12) consecutive month period, and shall render the source an area source of HAP emissions under Section 112 of the Clean Air Act (CAA).

(2) In order to render the source an area source of HAP emissions under Section 112 of the Clean Air Act (CAA), the Permittee shall comply with the following:

   (a) The total metallic HAP content of the shot used by the shotblast machines and wire mesh machines, identified as DC5, DC7, DC8, and DC-10, shall not exceed 0.0175 pound of total metallic HAPs per pound of shot.

   (b) Particulate emissions from the shotblast and wire mesh machines shall not exceed the following:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM Limit (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC5</td>
<td>4.64</td>
</tr>
<tr>
<td>DC7</td>
<td>2.85</td>
</tr>
<tr>
<td>DC8</td>
<td>2.85</td>
</tr>
<tr>
<td>DC-10</td>
<td>0.304</td>
</tr>
</tbody>
</table>

Compliance with these limits, combined with the potential to emit HAP from all other emission units at the source, shall limit the source-wide potential to emit single HAP to less than 10 tons per twelve (12) consecutive month period and the source-wide potential to emit total HAPs to less than 25 tons per
twelve (12) consecutive month period, and shall render the source an area source of HAP emissions under Section 112 of the Clean Air Act (CAA).

State Rule Applicability – Individual Facilities

State rule applicability has been reviewed as follows:

**Melting Furnaces SM3 and SM5**

**326 IAC 6.5 PM Limitations Except Lake County**
As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. Pursuant to 326 IAC 6.5-1-2, particulate matter (PM) emissions from each of the melting furnaces SM3 and SM5 shall not exceed 0.03 grain per dry standard cubic foot (dscf).

**Reverberatory Furnaces 2RF, 4RF, 6RF, 7RF, 8RF, 9RF, and 10RF**

**326 IAC 6.5 PM Limitations Except Lake County**
(a) As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. Pursuant to 326 IAC 6.5-1-2, particulate matter (PM) emissions from each of the reverberatory furnaces 4RF, 7RF, 8RF, 9RF, and 10RF shall not exceed 0.03 grain per dry standard cubic foot (dscf).

(b) As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. Pursuant to 326 IAC 6-5-5-2, particulate matter (PM) emissions from the reverberatory furnaces 2RF and 6RF shall not exceed the following:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Limit (ton/yr)</th>
<th>Emission Limit (grain/dscf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reverberatory Furnace 2RF</td>
<td>92.5</td>
<td>0.85</td>
</tr>
<tr>
<td>Reverberatory Furnace 6RF</td>
<td>36.2</td>
<td>0.63</td>
</tr>
</tbody>
</table>

**Shotblast Units (DC5 and DC-10) and Wire Mesh Machines (DC7 and DC8)**

**326 IAC 6.5 PM Limitations Except Lake County**
As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. Pursuant to 326 IAC 6.5-1-2, particulate matter (PM) emissions from each of the shotblast units (DC5 and DC-10) and the wire mesh machines (DC7 and DC8) shall not exceed 0.03 grain per dry standard cubic foot (dscf).

**Die Casting Machines**

**326 IAC 6.5 PM Limitations Except Lake County**
As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. Pursuant to 326 IAC 6.5-1-2, particulate matter (PM) emissions from die casting machines shall not exceed 0.03 grain per dry standard cubic foot (dscf).

**Heat Treat Furnaces and Air Make-Up Units (Natural Gas Combustion Units)**

**326 IAC 6.5 PM Limitations Except Lake County**
As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. Pursuant to 326 IAC 6.5-1-2, particulate matter (PM) emissions from heat treat furnaces and the air make-up units shall not exceed 0.03 grain per dry standard cubic foot (dscf).

**Brazing Equipment/ Cutting Torches/Soldering/Welding/Grinding and Machining Operations**

**326 IAC 6.5 PM Limitations Except Lake County**
As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. Pursuant to 326 IAC 6.5-1-2, particulate matter (PM) emissions from brazing equipment,
cutting torches, soldering, and welding units shall not exceed 0.03 grain per dry standard cubic foot (dscf).

**Emergency Generatory 450R071**

**326 IAC 6.5 PM Limitations Except Lake County**
As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. Pursuant to 326 IAC 6.5-1-2, particulate matter (PM) emissions from emergency generator 450R071 shall not exceed 0.03 grain per dry standard cubic foot (dscf).

**Dry Deburring Systems 1-7**

**326 IAC 6.5 PM Limitations Except Lake County**
As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. Pursuant to 326 IAC 6.5-1-2, particulate matter (PM) emissions from dry deburring systems 1-7 shall not exceed 0.03 grain per dry standard cubic foot (dscf).

### Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to assure 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.

(a) The Compliance Determination Requirements applicable to this source are as follows:

#### Testing Requirements:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Device</th>
<th>Timeframe for Testing or Date of Initial Valid Demonstration</th>
<th>Pollutant/Parameter</th>
<th>Frequency of Testing</th>
<th>Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reverberatory Furnace 2RF</td>
<td>N/A</td>
<td>June 14, 2014(1)</td>
<td>PM</td>
<td>every 5 years</td>
<td>326 IAC 2-2 40 CFR 63</td>
</tr>
<tr>
<td>Reverberatory Furnace 6RF</td>
<td>N/A</td>
<td>June 14, 2014(1)</td>
<td>PM</td>
<td>every 5 years</td>
<td>326 IAC 2-2 40 CFR 63</td>
</tr>
<tr>
<td>Melting Furnace SM3 and Reverberatory Furnace 4RF or Melting Furnace SM5 and Reverberatory Furnace 6RF (during fluxing operation)</td>
<td>N/A</td>
<td>June 14, 2014 (3), (4)</td>
<td>PM, PM10, and PM2.5</td>
<td>every 5 years</td>
<td>326 IAC 2-2 40 CFR 63</td>
</tr>
<tr>
<td>Melting Furnace SM3 and Reverberatory Furnace 4RF or</td>
<td>N/A</td>
<td>June 14, 2014 (3), (4)</td>
<td>PM, PM10, and PM2.5</td>
<td>every 5 years</td>
<td>326 IAC 2-2 40 CFR 63</td>
</tr>
<tr>
<td>Control Device</td>
<td>Type of Parametric Monitoring</td>
<td>Frequency</td>
<td>Range or Specification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------------------------------</td>
<td>-----------</td>
<td>----------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting Furnace SM5 and Reverberatory Furnace 6RF (when not conducting fluxing operation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reverberatory Furnace 7RF</td>
<td>N/A</td>
<td>June 17, 2015(2)</td>
<td>PM and PM10 every 5 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stack Melting Furnaces (SM3 or SM5), or one of the Reverberatory Furnaces (2RF, 4RF, or 6RF through 10RF)</td>
<td>N/A</td>
<td>June 17, 2015</td>
<td>HCl every 5 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reverberatory Furnace 8RF</td>
<td>N/A</td>
<td>June 17, 2015(2)</td>
<td>PM and PM10 every 5 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reverberatory Furnace 9RF</td>
<td>N/A</td>
<td>June 17, 2015(2)</td>
<td>PM and PM10 every 5 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reverberatory Furnace 10RF</td>
<td>N/A</td>
<td>June 17, 2015(2)</td>
<td>PM and PM10 every 5 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wire Mesh Shotblast Machine DC7</td>
<td>Cartridge Filter</td>
<td>March 21, 2018(5)</td>
<td>PM and PM10 every 5 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wire Mesh Shotblast Machine DC8</td>
<td>Cartridge Filter</td>
<td>March 21, 2018(5)</td>
<td>PM and PM10 every 5 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheelabrator rotary shotblast unit DC10</td>
<td>Cartridge Filter</td>
<td>July 26, 2017</td>
<td>PM, PM10, and PM2.5 every 5 years</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) IDEM OAQ has determined that testing of the shot blast unit DC5 is not required at this time to determine compliance with the PM and PM10 emission limits. IDEM has the authority to require testing at a later time if necessary to demonstrate compliance with any applicable requirement.

(2) Testing of the die casting machines, brazing equipment, cutting torches, soldering equipment, welding equipment, stockpiled soil, tooling operations, emergency generators, dry deburring systems, natural gas fired combustion sources, noncontact cooling towers, and paved and unpaved roads for particulate matter is not required because there are no control devices required to comply with any applicable requirements.

(b) The Compliance Monitoring Requirements applicable to this source are as follows:

<table>
<thead>
<tr>
<th>Control Device</th>
<th>Type of Parametric Monitoring</th>
<th>Frequency</th>
<th>Range or Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cartridge Filter Stack exhaust for DC5, DC7, DC8, and DC10.</td>
<td>Visible Emissions Notations</td>
<td>Daily</td>
<td>Verify whether emissions are normal or abnormal</td>
</tr>
</tbody>
</table>
These monitoring conditions are necessary because the cartridge filter for the Tumbleblast shotblast DC5 must operate properly to assure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), 40 CFR 63 (Hazardous Air Pollutants), and 326 IAC 6.5 (Particulate Matter Emission Limitations).

These monitoring conditions are necessary because the cartridge filter for the shotblast units DC7, DC8, and DC10 must operate properly to assure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), 40 CFR 63 (Hazardous Air Pollutants), 40 CFR 64 (CAM), and 326 IAC 6.5 (Particulate Matter Emission Limitations).

### Proposed Changes

As part of this permit approval, the permit may contain new or different permit conditions and some conditions from previously issued permits/approvals may have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes.

The following changes were made to conditions contained previously issued permits/approvals (these changes may include Title I changes):

1. IDEM, OAQ updated the emission unit descriptions to the reverberatory furnaces 2RF, 4RF, and 6RF, to correct the maximum remelt capacity and maximum flux usage.

2. IDEM, OAQ modified the PSD limitation for melters SM3 and SM5 and furnaces 4RF and 6RF, per the sources request.

3. IDEM, OAQ modified the testing Conditions D.1.7(b) and (c), since the Stack Melting Furnace SM3 and Reverberatory Furnace 4RF are now sharing a throughput and the Stack Melting Furnace SM5 and Reverberatory Furnace 6RF are now sharing a throughput. The testing conditions allow SM3/4RF and SM5/6RF to alternate between testing every five (5) years.

4. IDEM, OAQ removed the sections pertaining to the boilers, since they are no longer at the facility.

5. IDEM, OAQ removed the pressure drop compliance monitoring requirements for DC5, DC7, DC8, and DC-10, since these emission units will comply using visible emission notations.

Furnace SM3 and SM5 were previously named SM1 and SM2.

### Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on June 24, 2019.

The operation of this stationary aluminum die casting plant shall be subject to the conditions of the attached proposed Part 70 Operating Permit Renewal No. 067-41599-00065.

The staff recommends to the Commissioner that the Part 70 Operating Permit Renewal be approved.

### IDEM Contact

(a) If you have any questions regarding this permit, please contact Deena Levering, 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) 234-5400 or (800) 451-6027, and ask for Deena Levering or (317) 234-5400.

(b) A copy of the findings is available on the Internet at: [http://www.in.gov/ai/appfiles/idem-caats/](http://www.in.gov/ai/appfiles/idem-caats/)
For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: [http://www.in.gov/idem/airquality/2356.htm](http://www.in.gov/idem/airquality/2356.htm); and the Citizens' Guide to IDEM on the Internet at: [http://www.in.gov/idem/6900.htm](http://www.in.gov/idem/6900.htm).
## Emission Summary - Unrestricted Potential to Emit

### Company Name:
FCA US LLC - Kokomo Casting Plant

### Source Location:
1001 East Boulevard, Kokomo, Indiana 46904

### Permit No./Plt ID:
T067-41999-00065

### Reviewer:
Deena Levering

### Unrestricted Potential to Emit

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Emission Unit</th>
<th>Year of Initial Construction / Reconstruction</th>
<th>Unrestricted Potential to Emit (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>PM</td>
</tr>
<tr>
<td>SM3</td>
<td>Aluminum Stack Melting Furnace</td>
<td>2008</td>
<td>23.94</td>
</tr>
<tr>
<td>4RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>1998</td>
<td>23.94</td>
</tr>
<tr>
<td>SM5</td>
<td>Aluminum Stack Melting Furnace</td>
<td>2008 / 2017</td>
<td>23.94</td>
</tr>
<tr>
<td>6RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>1983</td>
<td>8.50</td>
</tr>
<tr>
<td>2RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>1984</td>
<td>2.17</td>
</tr>
<tr>
<td>7RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>1995</td>
<td>1.55</td>
</tr>
<tr>
<td>8RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>1995</td>
<td>1.55</td>
</tr>
<tr>
<td>9RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>1998</td>
<td>2.17</td>
</tr>
<tr>
<td>10RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>1998</td>
<td>2.17</td>
</tr>
<tr>
<td>DC5</td>
<td>Tumbleblast Shotblast Machine</td>
<td>2000</td>
<td>39.42</td>
</tr>
<tr>
<td>DC7</td>
<td>Wire Mesh Machine</td>
<td>2005</td>
<td>172.23</td>
</tr>
<tr>
<td>DC8</td>
<td>Wire Mesh Machine</td>
<td>2005</td>
<td>172.23</td>
</tr>
<tr>
<td>DC-10</td>
<td>Wheelabrator Rotary Shotblast Unit</td>
<td>2013</td>
<td>133.04</td>
</tr>
</tbody>
</table>

### Insignificant Activities

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Emission Unit</th>
<th>Year of Initial Construction / Reconstruction</th>
<th>Unrestricted Potential to Emit (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>PM</td>
</tr>
<tr>
<td>DCAST1</td>
<td>Die Casting Machines</td>
<td>Various</td>
<td>63.66</td>
</tr>
<tr>
<td></td>
<td>Brazing Equipment/ Cutting Torches/Soldering/Welding</td>
<td></td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td>Grinding and Machining Operations</td>
<td>1989</td>
<td>1.58</td>
</tr>
<tr>
<td>450 R071</td>
<td>Emergency Generator</td>
<td>1989</td>
<td>0.16</td>
</tr>
<tr>
<td>Dry Deburr 1 - 7</td>
<td>7 Dry Deburring Systems</td>
<td>2013</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>WWTP Operations</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

### Insignificant Natural Gas Combustion Sources

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Emission Unit</th>
<th>Year of Initial Construction / Reconstruction</th>
<th>Unrestricted Potential to Emit (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>PM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.63</td>
</tr>
</tbody>
</table>

### Total Emissions

<table>
<thead>
<tr>
<th>Emission Source</th>
<th>Total Emissions at Kokomo Casting Plant (KCP)</th>
<th>Total Emissions at Kokomo Transmission Plant (KTP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>648.21 651.45 651.45 1.42 91.05 9.88 73.18</td>
<td>1429.6 1425.6 1406.5 1059.7 459.5 132.0 250.4</td>
</tr>
</tbody>
</table>

*Other: To account for other possible sources of emissions that haven’t been calculated.
### Appendix A: Emissions Calculations

**Emission Summary - Potential to Emit After Controls**

**Company Name:** FCA US LLC - Kokomo Casting Plant  
**Source Location:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit No./Plt ID:** T067-41599-00065  
**Reviewer:** Deena Levering

### Potential to Emit After Controls

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Emission Unit</th>
<th>Year of Initial Construction / Reconstruction</th>
<th>Controlled Potential to Emit (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>PM</td>
</tr>
<tr>
<td>SM3</td>
<td>Aluminum Stack Melting Furnace</td>
<td>2008</td>
<td>23.94</td>
</tr>
<tr>
<td>4RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>1998</td>
<td></td>
</tr>
<tr>
<td>SM5</td>
<td>Aluminum Stack Melting Furnace</td>
<td>2008 / 2017</td>
<td>23.94</td>
</tr>
<tr>
<td>6RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>1983</td>
<td>8.50</td>
</tr>
<tr>
<td>2RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>1984</td>
<td>1.55</td>
</tr>
<tr>
<td>7RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>1995</td>
<td>2.17</td>
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<td>8RF</td>
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<td>1995</td>
<td>0.03</td>
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<tr>
<td>9RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>1998</td>
<td>0.03</td>
</tr>
<tr>
<td>10RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>1998</td>
<td>0.03</td>
</tr>
<tr>
<td>DC5</td>
<td>Tumbleblast Shotblast Machine</td>
<td>2000</td>
<td>0.39</td>
</tr>
<tr>
<td>DC7</td>
<td>Wire Mesh Machine</td>
<td>2005</td>
<td>1.72</td>
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<tr>
<td>DC8</td>
<td>Wire Mesh Machine</td>
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<td>1.72</td>
</tr>
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<td>DC10</td>
<td>Wheelabrator Rotary Shotblast Unit</td>
<td>2013</td>
<td>1.33</td>
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<tr>
<td>DCAST1</td>
<td>Die Casting Machines</td>
<td>Various</td>
<td>63.66</td>
</tr>
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<td></td>
<td>Brazing Equipment/Cutting Torches/Soldering/Welding</td>
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<tr>
<td></td>
<td>Grinding and Machining Operations</td>
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<td>0.16</td>
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<td>450 R071</td>
<td>Emergency Generator</td>
<td>1989</td>
<td>0.16</td>
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<td>Dry Deburr 1 - 7</td>
<td>7 Dry Deburring Systems</td>
<td>2013</td>
<td>0.12</td>
</tr>
<tr>
<td>WWTP Operations</td>
<td>--</td>
<td></td>
<td>--</td>
</tr>
<tr>
<td>Insignificant Natural Gas Combustion Sources</td>
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<td>0.63</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

**Total Emissions at Kokomo Casting Plant (KCP):** 135.04 138.28 138.28 1.42 91.05 9.88 73.18

**Total Emissions at Kokomo Transmission Plant (KTP):** 174.70 170.70 151.60 1059.70 459.50 132.00 250.40

**Total Source Emissions (KCP and KTP):** 309.74 308.98 289.88 1061.12 550.55 141.88 323.58

*Other: To account for other possible sources of emissions that haven’t been calculated.*
### Emissions Calculations

#### Emission Summary - Potential to Emit After Issue of Permit

**Company Name:** FCA US LLC - Kokomo Casting Plant  
**Source Location:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit No./Plt ID:** T067-41599-00065  
**Reviewer:** Deena Levering

#### Potential to Emit After Issuance of Permit (Limited PTE)

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Emission Unit</th>
<th>Year of Initial Construction / Reconstruction</th>
<th>Limited Potential to Emit (ton/yr) PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM3</td>
<td>Aluminum Stack Melting Furnace 2008</td>
<td>PM</td>
<td>14.28</td>
<td>15.04</td>
<td>13.03</td>
<td>0.08</td>
<td>13.28</td>
<td>0.73</td>
<td>11.16</td>
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<tr>
<td>4RF</td>
<td>Aluminum Reverberatory Furnace 1998</td>
<td>PM10</td>
<td>0.05</td>
<td>8.59</td>
<td>0.47</td>
<td>7.21</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>SM5</td>
<td>Aluminum Stack Melting Furnace 2008 / 2017</td>
<td>PM2.5</td>
<td>0.08</td>
<td>13.28</td>
<td>0.73</td>
<td>11.16</td>
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<tr>
<td>6RF</td>
<td>Aluminum Reverberatory Furnace 1983</td>
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<td>7.21</td>
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#### Total Emissions

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<th>Source</th>
<th>Total Emissions (ton/yr)</th>
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<tr>
<td>KCP</td>
<td>272.3 155.4 497.3 1.53 108.2 10.8 87.6</td>
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<tr>
<td>KTP</td>
<td>275.6 270.9 168.2 658.9 396.7 132.0 253.0</td>
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<td>547.9 426.3 665.5 660.4 504.9 142.8 340.6</td>
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*Other: To account for other possible sources of emissions that haven’t been calculated.

*Cells shaded orange represent the potential to emit after an emission limitation.
<table>
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<tr>
<th>Potential to Emit After Controls</th>
<th>Company Name: FCA US LLC - Kokomo Casting Plant</th>
<th>Source Location: 1001 East Boulevard, Kokomo, Indiana 46904</th>
<th>Permit No./PS ID: T067-41359-02055</th>
<th>Reviewer: Dean Leasing</th>
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<td><strong>Year of Initial Construction / Reconstruction</strong></td>
<td><strong>Year of Initial Permit</strong></td>
<td><strong>Year of Initial Control</strong></td>
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### Potential to Emit After Controls

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**Footnotes:**

- Cells shaded orange represent the potential to emit after an emission limitation.
- Insignificant Activities
  - DC-10: Tumbleblast Shotblast
  - SM5: DC-10 & 450
  - TSM: HAPs
  - 2 Slagging: Gas Combustion
  - DC-10: Hexane
  - SM5: Various

**Notes:**

- DC-10: Tumbleblast Shotblast
- SM5: DC-10 & 450
- TSM: HAPs
- 2 Slagging: Gas Combustion
- DC-10: Hexane
- SM5: Various

---

Company Name: FCA US LLC - Kokomo Casting Plant
Source Location: 1001 East Boulevard, Kokomo, Indiana 46904
Permit No./Pj No. ID: 1067-41555-02055
Reviewer: Dees Leasing

---

**Notes:**

- Data shaded orange represent the potential to emit after an emission limitation.
- Data shaded in box represent the potential to emit after control. Even though there is not a limit for this pollutant, the control is required for a different pollutant.
### Appendix A: Emissions Calculations

#### Natural Gas Combustion (Less than 100 MMBtu/hr)

**Company Name:** FCA US LLC - Kokomo Casting Plant  
**Source Location:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit No./PIT ID:** T067-41599-00085  
**Reviewer:** Deena Levering

#### Criteria Pollutants

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<tr>
<th>Emission Unit</th>
<th>Heat Input Capacity (MMBtu/hr)</th>
<th>Potential Throughput (MCF/yr)</th>
<th>Emission Factor in lb/MMCF</th>
<th>Potential Emissions (ton/yr)</th>
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<tr>
<td>SM3: Al Stack Melting Furnace</td>
<td>10.93</td>
<td>93.869</td>
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<td>0.357</td>
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<td>10.93</td>
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<td>4 NG Air Make-Up Units</td>
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**Potential Emissions Factors are from AP-42, Tables 1.4-3 and 1.4-4.**

PM10 emission factor is filterable PM only. PM2.5 emission factor is filterable PM10 and condensable PM combined. PM emission factor is filterable PM2.5 and condensable PM combined.

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

#### HAPs - Organics

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<tr>
<th>Emission Unit</th>
<th>Heat Input Capacity (MMBtu/hr)</th>
<th>Potential Throughput (MCF/yr)</th>
<th>Emission Factor for Natural Gas Combustion (lb/MMCF)</th>
<th>Potential Emissions (ton/yr)</th>
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<td>9.0E-05</td>
<td>5.2E-06</td>
</tr>
<tr>
<td>8RF: Al Reverberatory Furnace</td>
<td>10</td>
<td>85.882</td>
<td>9.0E-05</td>
<td>5.2E-06</td>
</tr>
<tr>
<td>1RF: Al Reverberatory Furnace</td>
<td>10</td>
<td>85.882</td>
<td>9.0E-05</td>
<td>5.2E-06</td>
</tr>
<tr>
<td>4 NG Heat Treat Furnaces (0.8 MMBtu/hr each)</td>
<td>3.2</td>
<td>27.482</td>
<td>2.9E-05</td>
<td>1.6E-05</td>
</tr>
<tr>
<td>4 NG Air Make-Up Units</td>
<td>74.4</td>
<td>638.984</td>
<td>6.7E-04</td>
<td>3.8E-04</td>
</tr>
</tbody>
</table>

#### HAPs - Metals

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Heat Input Capacity (MMBtu/hr)</th>
<th>Potential Throughput (MCF/yr)</th>
<th>Emission Factor for Natural Gas Combustion (lb/MMCF)</th>
<th>Potential Emissions (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM3: Al Stack Melting Furnace</td>
<td>10.93</td>
<td>93.869</td>
<td>9.9E-06</td>
<td>5.6E-07</td>
</tr>
<tr>
<td>SM3: Al Stack Melting Furnace</td>
<td>10.93</td>
<td>93.869</td>
<td>9.9E-06</td>
<td>5.6E-07</td>
</tr>
<tr>
<td>2RF: Al Reverberatory Furnace</td>
<td>20</td>
<td>171.765</td>
<td>1.72E-05</td>
<td>1.03E-06</td>
</tr>
<tr>
<td>2RF: Al Reverberatory Furnace</td>
<td>20</td>
<td>171.765</td>
<td>1.72E-05</td>
<td>1.03E-06</td>
</tr>
<tr>
<td>8RF: Al Reverberatory Furnace</td>
<td>20</td>
<td>171.765</td>
<td>1.72E-05</td>
<td>1.03E-06</td>
</tr>
<tr>
<td>4 NG Heat Treat Furnaces (0.8 MMBtu/hr each)</td>
<td>3.2</td>
<td>27.482</td>
<td>8.9E-06</td>
<td>5.1E-07</td>
</tr>
<tr>
<td>4 NG Air Make-Up Units</td>
<td>74.4</td>
<td>638.984</td>
<td>6.3E-06</td>
<td>3.8E-06</td>
</tr>
</tbody>
</table>

**Methodology**

Heating Value of Natural Gas is assumed to be 1020 MMBtu/MMCF

Potential Throughput (MCF/yr) = Heat Input Capacity (MMBtu/hr) * 8,760 hrs/yr * 1 MCF/1,020 MMBtu

Potential Emission (ton/yr) = Throughput (MCF/yr) * Emission Factor (lb/MMCF) / (1 ton/2,000 lb)
Reverberatory Furnaces - Particulate Emissions

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Process</th>
<th>Total Capacity [ton/hr]</th>
<th>Remelt Capacity [ton/hr]</th>
<th>Flux Capacity [ton/hr]</th>
<th>Emission Factor for Remelting (lb/hr)</th>
<th>Emission Factor for Fluxing (lb/hr)</th>
<th>PTE (lb/hr)</th>
<th>% of Time Melting</th>
<th>% of Time Fluxing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2RF</td>
<td>Aluminum</td>
<td>30</td>
<td>6.5</td>
<td>100</td>
<td>0.391 0.391 0.391</td>
<td>0.129 0.129 0.129</td>
<td>2.54 2.54 2.54</td>
<td>1.55</td>
<td>1.55</td>
</tr>
<tr>
<td>7RF</td>
<td>Aluminum</td>
<td>10</td>
<td>see note*</td>
<td>82.2</td>
<td>N/A N/A N/A</td>
<td>0.129 0.129 0.129</td>
<td>0.00 0.00 0.00</td>
<td>0.44</td>
<td>0.44</td>
</tr>
<tr>
<td>8RF</td>
<td>Aluminum</td>
<td>10</td>
<td>see note*</td>
<td>115.6</td>
<td>N/A N/A N/A</td>
<td>0.129 0.129 0.129</td>
<td>0.00 0.00 0.00</td>
<td>0.62</td>
<td>0.62</td>
</tr>
<tr>
<td>9RF</td>
<td>Aluminum</td>
<td>10</td>
<td>see note*</td>
<td>115.6</td>
<td>N/A N/A N/A</td>
<td>0.129 0.129 0.129</td>
<td>0.00 0.00 0.00</td>
<td>2.17</td>
<td>2.17</td>
</tr>
</tbody>
</table>

Methodology

Limited PTE - Reverberatory Furnaces

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Process</th>
<th>Limited Remelt PTE (ton/hr)</th>
<th>Limited Flux PTE (ton/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2RF</td>
<td>Aluminum</td>
<td>262800</td>
<td>N/A</td>
</tr>
<tr>
<td>7RF</td>
<td>Reverberatory</td>
<td>N/A</td>
<td>30000</td>
</tr>
<tr>
<td>8RF</td>
<td>Reverberatory</td>
<td>N/A</td>
<td>41975</td>
</tr>
<tr>
<td>9RF</td>
<td>Aluminum</td>
<td>N/A</td>
<td>30000</td>
</tr>
<tr>
<td>10RF</td>
<td>Aluminum</td>
<td>N/A</td>
<td>41975</td>
</tr>
</tbody>
</table>

Methodology

Reverberatory Furnaces - HAP Emissions

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Process</th>
<th>Flux Rate [lb/hr]</th>
<th>Max Mn Content (%)</th>
<th>Max Ni Content (%)</th>
<th>Maximum Metal HAP Content</th>
<th>PTE Mn (ton/yr)</th>
<th>PTE Ni (ton/yr)</th>
<th>PTE Total Metal HAPs (ton/yr)</th>
<th>PTE HCl (ton/yr)</th>
<th>PTE HAPs (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2RF</td>
<td>Aluminum</td>
<td>100</td>
<td>0.50%</td>
<td>0.50%</td>
<td>1%</td>
<td>0.04 0.04</td>
<td>0.08</td>
<td>0.0195</td>
<td>0.36</td>
<td>0.44</td>
</tr>
<tr>
<td>7RF</td>
<td>Aluminum</td>
<td>82.2</td>
<td>0.50%</td>
<td>0.50%</td>
<td>1%</td>
<td>0.01 0.01</td>
<td>0.02</td>
<td>0.0195</td>
<td>0.29</td>
<td>0.31</td>
</tr>
<tr>
<td>8RF</td>
<td>Aluminum</td>
<td>115.6</td>
<td>0.50%</td>
<td>0.50%</td>
<td>1%</td>
<td>0.01 0.01</td>
<td>0.02</td>
<td>0.0195</td>
<td>0.41</td>
<td>0.43</td>
</tr>
<tr>
<td>9RF</td>
<td>Aluminum</td>
<td>115.6</td>
<td>0.50%</td>
<td>0.50%</td>
<td>1%</td>
<td>0.01 0.01</td>
<td>0.02</td>
<td>0.0195</td>
<td>0.41</td>
<td>0.43</td>
</tr>
</tbody>
</table>

Methodology

HAP and limit based on the Chrysler aluminum alloy specification that requires that the individual concentrations of Mn and Ni ≤ 0.5%. The maximum metal HAP content is based on permit limits.

Limited PTE - Reverberatory Furnaces

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Process</th>
<th>Limited Remelt PTE (ton/yr)</th>
<th>Limited Flux PTE (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2RF</td>
<td>Aluminum</td>
<td>262800</td>
<td>N/A</td>
</tr>
<tr>
<td>7RF</td>
<td>Reverberatory</td>
<td>N/A</td>
<td>30000</td>
</tr>
<tr>
<td>8RF</td>
<td>Reverberatory</td>
<td>N/A</td>
<td>41975</td>
</tr>
</tbody>
</table>

Methodology

The limit established under "Limited PTE PM (ton/hr)" for 2RF is from 326 IAC 5.5-2. **The furnaces cannot perform remelting and fluxing simultaneously. Hourly particulate emissions from remelting are higher than during fluxing. For purposes of limiting the PTE of the furnaces, the remelting capacity was used as the maximum capacity of the furnaces. Therefore, the worst case emissions are represented.**

Limited PTE Remelting/Fluxing (ton/hr) = Limited Remelt Rate (ton/hr) x Limited PTE PM Melting/Remelting (lb/hr/melt) x (1 ton/2000 lb)

Limited PTE Fluxing (ton/hr) = Limited Flux Usage (ton/hr) x Limited PTE Fluxing (lb/hr) x (1 ton/2000 lb)

Total Limited PTE (ton/hr) = Total Limited PTE Remelting (ton/hr) + Total Limited PTE Fluxing (ton/hr)

Limited PTE Metal HAPs (ton/yr) = Total Limited PTE PM (ton/yr) x Limited Metal HAP Content (%)

Limited Total HAPs (ton/yr) = Limited PTE Metal HAPs (ton/yr) + PTE HCl (ton/yr)

Note: Limited Total HAPs is an overestimate for 2RF, 4RF, and 6RF since these furnaces cannot perform remelting and fluxing simultaneously. The flux usage has not been limited for these furnaces. Therefore, as a conservative estimate of emissions, metallic HAPs are included as Limited Plus the unrestricted potential HCl emissions.
Appendix A: Emission Calculations

Stack Melting (SM3) and Aluminum Reverberatory Furnace (RF4) Process Emissions

Company Name: FCA US LLC - Kokomo Casting Plant
Source Location: 1001 East Boulevard, Kokomo, Indiana 46904
Permit No./Plt ID: T067-41599-00065
Reviewer: Deena Levering

Melting and Fluxing - Particulate Emissions

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Process</th>
<th>Remelt Rate (ton/hr)</th>
<th>Emission Factor for Melting/Remelting</th>
<th>PTE (lb/hr)</th>
<th>PTE (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>PM</td>
<td>PM10</td>
<td>PM2.5</td>
</tr>
<tr>
<td>SM3</td>
<td>Aluminum Stack Melting Furnace</td>
<td>10.9</td>
<td>0.525</td>
<td>0.525</td>
<td>0.525</td>
</tr>
<tr>
<td>4RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>21900</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Methodology

Emission Factor (lb/ton) for melting/remelting and emissions from fluxing (lb/hr) are based on stack testing performed on #4 Furnace in 1999.

The stack melting furnaces are not capable of fluxing and remelting simultaneously. It is estimated that the maximum hours of operation are 8030 per year for remelting and 730 per year for fluxing.

Since these emissions are based on stack testing, they include particulate emissions due to natural gas combustion.

Melting and Fluxing - HAP Emissions

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Process</th>
<th>Flux Rate (lb/yr)</th>
<th>Max Mn Content (%)</th>
<th>Max Ni Content (%)</th>
<th>Maximum Metallic HAP Content</th>
<th>PTE Mn (ton/yr)</th>
<th>PTE Ni (ton/yr)</th>
<th>PTE Total Metal HAPs (ton/yr)</th>
<th>HCI Emissions (lb HCl/lb Flux)</th>
<th>PTE HCl (ton/yr)</th>
<th>PTE Total HAPs (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM3</td>
<td>Aluminum Stack Melting Furnace</td>
<td>21900</td>
<td>0.50%</td>
<td>0.50%</td>
<td>1%</td>
<td>0.12</td>
<td>0.12</td>
<td>0.24</td>
<td>0.0195</td>
<td>0.21</td>
<td>0.45</td>
</tr>
<tr>
<td>4RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>50000</td>
<td>14000</td>
<td>0.525</td>
<td>0.525</td>
<td>0.45</td>
<td>0.129</td>
<td>0.129</td>
<td>0.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Methodology

Mn and Ni content based on the FCA US LLC aluminum alloy specification that requires that the individual concentrations of Mn and Ni be ≤ 0.5%.

Limited PTE Melting and Fluxing

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Process</th>
<th>Limited Melt/Remelt Rate (ton/yr)</th>
<th>Limited Flux Usage (lb/yr)</th>
<th>Limit for Melting/Remelting (lb/ton melt/remelt)</th>
<th>Limit for Fluxing (lb/lb flux)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM3</td>
<td>Aluminum Stack Melting Furnace</td>
<td>13.1</td>
<td>13.1</td>
<td>0.90</td>
<td>0.90</td>
</tr>
<tr>
<td>4RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>0.24</td>
<td>5.72</td>
<td>0.50%</td>
<td>0.50%</td>
</tr>
</tbody>
</table>

Methodology

Limited PTE Melting/Remelting (ton/yr) = Limited Melt/Remelt Rate (ton/yr) x (1 ton/2000 lb)
Limited PTE Fluxing (ton/yr) = Limited Flux Usage (lb/yr) x PM10 Limit for Fluxing (lb/lb flux) x (1 ton/2000 lb)
Total Limited PTE Melting (ton/yr) = Limited PTE Melting/Remelting (ton/yr) + Limited PTE Fluxing (ton/yr)
Limited PTE Total HAPs (ton/year) = Total Limited PTE Melting (ton/year) x Limited Metallic HAP Content (%)
Appendix A: Emission Calculations

Stack Melting (SM3 and SM5) Process Emissions

Company Name: FCA US LLC - Kokomo Casting Plant
Source Location: 1001 East Boulevard, Kokomo, Indiana 46904
Permit No./PIT ID: T067-41599-00065
Reviewer: Deena Levering

Melting and Fluxing - Particulate Emissions

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Process</th>
<th>Remelt Rate (ton/hr)</th>
<th>Emission Factor for Melting/Remelting (lb/ton melt/remelt)</th>
<th>PTE (lb/hr)</th>
<th>PTE (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>PM</td>
<td>PM10</td>
<td>PM2.5</td>
</tr>
<tr>
<td>6RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>10.9</td>
<td>0.525</td>
<td>0.525</td>
<td>5.72</td>
</tr>
<tr>
<td>SM5</td>
<td>Aluminum Stack Melting Furnace</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Methodology

Emission Factor (lb/ton) for melting/remelting and emissions from fluxing (lb/hr) are based on stack testing performed on #4 Furnace in 1999.

The stack melting furnaces are not capable of fluxing and remelting simultaneously. It is estimated that the maximum hours of operation are 8030 per year for remelting and 730 per year for fluxing.

PTE (ton/yr) = [(PTE Melting/Remelting (lb/hr) x (8030 hr/yr)) + (PTE Fluxing (lb/hr) x (730 hr/yr))] x (1 ton/2000 lb)

Since these emissions are based on stack testing, they include particulate emissions due to natural gas combustion.

Melting and Fluxing - HAP Emissions

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Process</th>
<th>Flux Rate (lb/yr)</th>
<th>Max Mn Content (%)</th>
<th>Max Ni Content (%)</th>
<th>Maximum Metallic HAP Content</th>
<th>PTE Mn (ton/yr)</th>
<th>PTE Ni (ton/yr)</th>
<th>PTE Total Metal HAPs (ton/yr)</th>
<th>HCl Emissions (lb HCl/lb flux)</th>
<th>PTE HCl (ton/yr)</th>
<th>PTE Total HAPs (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6RF</td>
<td>Aluminum Reverberatory Furnace</td>
<td>21900</td>
<td>0.50%</td>
<td>0.50%</td>
<td>1%</td>
<td>0.12</td>
<td>0.12</td>
<td>0.237</td>
<td>0.0195</td>
<td>0.21</td>
<td>0.45</td>
</tr>
<tr>
<td>SM5</td>
<td>Aluminum Stack Melting Furnace</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Methodology

Mn and Ni content based on the FCA US LLC aluminum alloy specification that requires that the individual concentrations of Mn and Ni be ≤ 0.5%.

The maximum metallic HAP content is based on permit limits.

PTE HAP (ton/yr) = PTE PM (ton/yr) x HAP content (%)

HCl Emissions: The source has indicated that HCl emissions may occur during fluxing due to the addition of solid chloride salts as part of KCP’s fluxing methodology. The HCl emissions are based on a chloride content of 0.39 lb/lb flux and an estimated release of 5% of the chlorine as HCl. Note, the Permittee will be required to test for HCl emissions.

PTE HCl (ton/yr) = Flux Rate (lb/yr) x HCl Emissions (lb HCl/lb flux) x (1 ton/2000 lb)

Limited PTE - Melting and Fluxing

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Process</th>
<th>Limited Melt/Remelt Rate (ton/yr)</th>
<th>Limited Flux Usage (lb/yr)</th>
<th>Limit for Melting/Remelting (lb/ton melt/remelt)</th>
<th>Limit for Fluxing (lb/lb flux)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6RF</td>
<td>Aluminum Stack Melting Furnace</td>
<td>54000</td>
<td>14000</td>
<td>0.525</td>
<td>0.45</td>
</tr>
<tr>
<td>SM5</td>
<td>Aluminum Stack Melting Furnace</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Methodology

Limited PTE Melting/Remelting (ton/yr) = Limited Melt/Remelt Rate (ton/yr) x PM10 Limit for Melting/Remelting (lb/ton melt/remelt) x (1 ton/2000 lb)

Limited PTE Fluxing (ton/yr) = Limited Flux Usage (lb/yr) x PM10 Limit for Fluxing (lb/lb flux) x (1 ton/2000 lb)

Limited PTE - Melting and Fluxing (ton/yr) = Limited PTE Melting/Remelting (ton/yr) + Limited PTE Fluxing (ton/yr)

Limited PTE Metallic HAPs (ton/yr) = Total Limited PTE Melting/Remelting (ton/yr) x Limited Metallic HAP Content (%)

Limited Total HAPs (ton/yr) = Limited PTE Metallic HAPs (ton/yr) + PTE HCl (ton/yr)
Appendix A: Emission Calculations
Blasting Units (DC2, DC4, DC5, DC7, DC8, DC9, DC-10, DC-11)

Company Name: FCA US LLC - Kokomo Casting Plant
Source Location: 1001 East Boulevard, Kokomo, Indiana 46904
Permit No./Plt ID: T067-41599-00065
Reviewer: Deena Levering

### Particulate Emissions

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Process</th>
<th>Shotblast Recirculation Rate (lb/hr)</th>
<th>Uncontrolled Particulate Emission Factor (lb PM/lb shot)</th>
<th>Control Efficiency</th>
<th>Uncontrolled PTE PM/PM10/PM2.5 (ton/yr)</th>
<th>Controlled PTE PM/PM10/PM2.5 (ton/yr)</th>
<th>Limited PTE PM (ton/yr)</th>
<th>Limited PTE PM10 (ton/yr)</th>
<th>Limited PTE PM2.5 (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC5</td>
<td>Tumbleblast Shotblast Machine</td>
<td>40000</td>
<td>0.000225</td>
<td>99%</td>
<td>39.42</td>
<td>0.39</td>
<td>4.64</td>
<td>20.32</td>
<td>2.36</td>
</tr>
<tr>
<td>DC7</td>
<td>Wire Mesh Machine</td>
<td>174760</td>
<td>0.000225</td>
<td>99%</td>
<td>172.23</td>
<td>1.72</td>
<td>2.85</td>
<td>12.48</td>
<td>1.71</td>
</tr>
<tr>
<td>DC8</td>
<td>Wire Mesh Machine</td>
<td>174760</td>
<td>0.000225</td>
<td>99%</td>
<td>172.23</td>
<td>1.72</td>
<td>2.85</td>
<td>12.48</td>
<td>1.71</td>
</tr>
<tr>
<td>DC-10</td>
<td>Wheelabrator Rotary Shotblast Unit</td>
<td>135000</td>
<td>0.000225</td>
<td>99%</td>
<td>133.04</td>
<td>1.33</td>
<td>0.304</td>
<td>1.33</td>
<td>0.304</td>
</tr>
</tbody>
</table>

**Methodology**

Uncontrolled Emission Factor is based on stack tests performed in March of 1996 for an existing shot blast unit at KCP. A conservative approach is used to assume PM = PM10 = PM2.5.

Uncontrolled PTE PM/PM10/PM2.5 (ton/yr) = Shotblast Recirculation Rate (lb/hr) x Emission Factor (lb PM/lb shot) x (8760 hr/yr) x (1 ton/2000 lb)

Controlled PTE PM/PM10/PM2.5 (ton/yr) = Uncontrolled PTE (ton/yr) x (1 - Control Efficiency)

Limited PTE = Permit Emission Limit (lb/hr) x (8760 hr/yr) x (1 ton/2000 lb)

Note: The inlet grain loading is estimated at 0.98 gr/cf with an outlet grain loading of 0.0098 gr/cf. Therefore, the units are capable of complying with 326 IAC 6.5 with the use of control.

### HAP Emissions

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Process</th>
<th>Cr Content of Shot (%)</th>
<th>Mn Content of Shot (%)</th>
<th>Ni Content of Shot (%)</th>
<th>Max Total HAP Content (%)</th>
<th>Uncontrolled PTE HAP (ton/yr)</th>
<th>Controlled PTE HAP (ton/yr)</th>
<th>Limited PTE HAP (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Cr Mn Ni</td>
<td>Total HAP</td>
<td>Cr Mn Ni</td>
<td>Total HAP</td>
<td>Cr Mn Ni</td>
<td>Total HAP</td>
<td>Cr Mn Ni</td>
</tr>
<tr>
<td>DC5</td>
<td>Tumbleblast Shotblast Machine</td>
<td>0.21% 0.87% 0.08%</td>
<td>1.75%</td>
<td>0.08 0.34 0.03</td>
<td>0.69</td>
<td>0.001 0.003 0.000 0.000 0.007</td>
<td>0.043 0.177 0.016 0.356</td>
<td></td>
</tr>
<tr>
<td>DC7</td>
<td>Wire Mesh Machine</td>
<td>0.21% 0.87% 0.08%</td>
<td>1.75%</td>
<td>0.36 1.50 0.14</td>
<td>3.01</td>
<td>0.004 0.015 0.001 0.030</td>
<td>0.026 0.109 0.010 0.218</td>
<td></td>
</tr>
<tr>
<td>DC8</td>
<td>Wire Mesh Machine</td>
<td>0.21% 0.87% 0.08%</td>
<td>1.75%</td>
<td>0.36 1.50 0.14</td>
<td>3.01</td>
<td>0.004 0.015 0.001 0.030</td>
<td>0.026 0.109 0.010 0.218</td>
<td></td>
</tr>
<tr>
<td>DC-10</td>
<td>Wheelabrator Rotary Shotblast Unit</td>
<td>0.21% 0.87% 0.08%</td>
<td>1.75%</td>
<td>0.28 1.16 0.11</td>
<td>2.33</td>
<td>0.003 0.012 0.001 0.023</td>
<td>0.003 0.012 0.001 0.023</td>
<td></td>
</tr>
</tbody>
</table>

**Methodology**

Uncontrolled/Controlled/Limited HAP Emissions (ton/yr) = Uncontrolled/Controlled/Limited PTE PM x HAP Content

The Shot Blast Media Mn, Ni, and Cr content is based on manufacturer QA/QC data for SAE-280 and SAE-390 Shot Blast Media.

The maximum allowed total HAPs for the units is 1.75%.

Note: The HAP content of the metal being blasted is less than 1.75%. Therefore, any particulate due to the metal parts will not cause emissions higher than those calculated here.

Max Total HAP Content (%) based off of SDS obtained from the manufacturer of the shot blast products used.
Four Segments to the Die Casting Operation:

**Segment 1: Aluminum Die Casting**
Emissions are negligible because aluminum is being injected into a closed system.

**Segment 2: Die Lube**

<table>
<thead>
<tr>
<th>Maximum Usage per Unit (gal/hr)</th>
<th>Density (lb/gal)</th>
<th>Potential Usage per Unit (lb/hr)</th>
<th>% Solids</th>
<th>Emission Factor (%)</th>
<th>PM/PM10/PM2.5 PTE per Unit (lb/hr)</th>
<th>PM/PM10/PM2.5 PTE per Unit (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.30625</td>
<td>8.23</td>
<td>2.52</td>
<td>35%</td>
<td>8%</td>
<td>0.071</td>
<td>0.31</td>
</tr>
</tbody>
</table>

Potential Usage (lb/hr) = Maximum Usage (gal/hr) x Density (lb/gal)
PM/PM10/PM2.5 PTE (lb/hr) = Potential Usage (lb/hr) x % Solids x Emission Factor (%)
PTE (ton/yr) = PTE (lb/hr) x (8760 hr/yr) x (1 ton/2000 lb)
The Emission Factor is based on 8% of die lube being emitted, 2% staying on the part, and 90% going to the Waste Water Treatment Plant.

**Segment 3: Hot Oil System Lube**
Hot oil is used in a closed loop system. The oil flows through a heater into the die and back to the heater for the purpose of preheating the die temperature. Losses to the atmosphere are negligible.

**Segment 4: Tip Lube**

<table>
<thead>
<tr>
<th>Maximum Usage per Unit (gal/hr)</th>
<th>Density (lb/gal)</th>
<th>Potential Usage per Unit (lb/hr)</th>
<th>% Solids</th>
<th>Emission Factor (%)</th>
<th>PM/PM10/PM2.5 PTE per Unit (lb/hr)</th>
<th>PM/PM10/PM2.5 PTE per Unit (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.139375</td>
<td>7.34</td>
<td>1.02</td>
<td>100%</td>
<td>8%</td>
<td>0.082</td>
<td>0.36</td>
</tr>
</tbody>
</table>

Total PM/PM10/PM2.5 PTE per Unit (lb/hr) = 0.153

= PTE per Unit (lb/hr) from Segment 2 + PTE per Unit (lb/hr) from Segment 4

**Total Emissions**

<table>
<thead>
<tr>
<th>Total Number of Die Cast Machines</th>
<th>PM/PM10/PM2.5 Emission Factor (lb/hr) Per Unit</th>
<th>PTE PM/PM10/PM2.5 (lb/hr)</th>
<th>PTE PM/PM10/PM2.5 (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>95</td>
<td>0.153</td>
<td>14.54</td>
<td>63.66</td>
</tr>
</tbody>
</table>

PTE PM/PM10/PM2.5 (lb/hr) = Total Number of Die Cast Machines x PM/PM10/PM2.5 Emission Factor (lb/hr) Per Unit
PTE PM/PM10/PM2.5 (ton/yr) = PTE PM/PM10/PM2.5 (lb/hr) x (8760 hr/yr) x (1 ton/2000 lb)
Appendix A: Emission Calculations

Brazing/Soldering/Welding Operations and Machining and Grinding Operations

Company Name: FCA US LLC - Kokomo Casting Plant
Source Location: 1001 East Boulevard, Kokomo, Indiana 46904
Permit No./Plt ID: T067-41599-00065
Reviewer: Deena Levering

Brazing/Soldering/Welding Operations

<table>
<thead>
<tr>
<th>Estimated PM Emissions (lb/yr)</th>
<th>PM Emissions (ton/yr)</th>
<th>Estimated HAP Emissions (lb/yr)</th>
<th>HAP Emissions (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>122</td>
<td>0.061</td>
<td>10</td>
<td>0.005</td>
</tr>
</tbody>
</table>

Methodology
The Permittee provided estimated PM and HAP emissions in pounds per year.
Emissions (ton/yr) = Emissions (lb/yr) x (1 ton/2000 lb)

Machining and Grinding Operations

<table>
<thead>
<tr>
<th>Unit</th>
<th>PM Emission Factor (lb/staff-hr)</th>
<th>Staff Use Per Day (staff-hr/day)</th>
<th>PM Emission Rate (lb/day)</th>
<th>Uncontrolled PTE PM (ton/yr)</th>
<th>Control Efficiency (%)</th>
<th>Controlled PTE PM (ton/yr)</th>
<th>Mn Content (%)</th>
<th>Ni Content (%)</th>
<th>Uncontrolled PTE</th>
<th>Controlled PTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tooling Operations</td>
<td>0.096</td>
<td>90</td>
<td>8.64</td>
<td>1.58</td>
<td>90%</td>
<td>0.16</td>
<td>1.0%</td>
<td>1.0%</td>
<td>0.016</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Methodology
PM Emission Factor from the DaimlerChrysler Emission Estimation Manual (September 1998)
PM Emission Rate (lb/day) = PM Emission Factor (lb/staff-hr) x Staff Use Per Day (staff-hr/day)
Uncontrolled PTE PM (ton/yr) = PM Emission Rate (lb/hr) x (365 day/yr) x (1 ton/2000 lb)
Controlled PTE PM (ton/yr) = Uncontrolled PTE PM (ton/yr) x (1 - Control Efficiency)
Assume PM = PM10 = PM2.5
Mn and Ni content based on the maximum concentrations allowed in the aluminum alloy.
Uncontrolled PTE HAP (ton/yr) = Uncontrolled PTE PM (ton/yr) x HAP Content (%)
Controlled PTE HAP (ton/yr) = Controlled PTE PM (ton/yr) x HAP Content (%)
### Appendix A: Emission Calculations

**Large Reciprocating Internal Combustion Engines - Diesel Fuel**

**Output Rating (>600 HP)**

**Maximum Input Rate (>4.2 MMBtu/hr)**

**Company Name:** FCA US LLC - Kokomo Casting Plant

**Source Location:** 1001 East Boulevard, Kokomo, Indiana 46904

**Permit No./Plt ID:** T067-41599-00065

**Reviewer:** Deena Levering

<table>
<thead>
<tr>
<th>Output Horsepower Rating (hp)</th>
<th>Generator ID</th>
<th>Site Rating (HP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>900.0</td>
<td>450R071</td>
<td>900</td>
</tr>
</tbody>
</table>

| Maximum Hours Operated per Year | 500 |
| Potential Throughput (hp-hr/yr) | 450,000 |

| Sulfur Content (S) of Fuel (% by weight) | 0.500 |

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor in lb/hp-hr</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM*</td>
<td>7.00E-04</td>
<td>0.16</td>
</tr>
<tr>
<td>PM10*</td>
<td>4.01E-04</td>
<td>0.09</td>
</tr>
<tr>
<td>Direct PM2.5*</td>
<td>3.89E-04</td>
<td>0.09</td>
</tr>
<tr>
<td>SO2</td>
<td>4.05E-03 (.00809S)</td>
<td>0.91</td>
</tr>
<tr>
<td>NOx</td>
<td>2.40E-02</td>
<td>5.40</td>
</tr>
<tr>
<td>VOC</td>
<td>7.05E-04</td>
<td>0.16</td>
</tr>
<tr>
<td>CO</td>
<td>5.50E-03</td>
<td>1.24</td>
</tr>
</tbody>
</table>

*PM10 and PM2.5 emission factors in lb/hp-hr were calculated using the emission factor in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1). PM is filterable particulate only. PM10 and PM2.5 are filterable and condensible particulate combined.

**NOx emission factor:** uncontrolled = 0.024 lb/hp-hr, controlled by ignition timing retard = 0.013 lb/hp-hr

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor in lb/hp-hr****</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>5.43E-06</td>
<td>1.22E-03</td>
</tr>
<tr>
<td>Toluene</td>
<td>1.97E-06</td>
<td>4.43E-04</td>
</tr>
<tr>
<td>Xylene</td>
<td>1.35E-06</td>
<td>3.04E-04</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>5.52E-07</td>
<td>1.24E-04</td>
</tr>
<tr>
<td>Acetaldehyde</td>
<td>1.76E-07</td>
<td>3.97E-05</td>
</tr>
<tr>
<td>Acrolein</td>
<td>5.52E-08</td>
<td>1.24E-05</td>
</tr>
</tbody>
</table>

**HAPs***

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor in lb/hp-hr***</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>5.43E-06</td>
<td>1.48E-06</td>
</tr>
<tr>
<td>Toluene</td>
<td>1.97E-06</td>
<td>3.34E-04</td>
</tr>
<tr>
<td>Xylene</td>
<td>1.35E-06</td>
<td>3.48E-04</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>5.52E-07</td>
<td>1.24E-05</td>
</tr>
<tr>
<td>Acetaldehyde</td>
<td>1.76E-07</td>
<td>3.97E-05</td>
</tr>
<tr>
<td>Acrolein</td>
<td>5.52E-08</td>
<td>1.24E-05</td>
</tr>
</tbody>
</table>

***PAH = Polycyclic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor in lb/hp-hr****</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>5.43E-06</td>
<td>1.22E-03</td>
</tr>
<tr>
<td>Toluene</td>
<td>1.97E-06</td>
<td>4.43E-04</td>
</tr>
<tr>
<td>Xylene</td>
<td>1.35E-06</td>
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<tr>
<td>Formaldehyde</td>
<td>5.52E-07</td>
<td>1.24E-04</td>
</tr>
<tr>
<td>Acetaldehyde</td>
<td>1.76E-07</td>
<td>3.97E-05</td>
</tr>
<tr>
<td>Acrolein</td>
<td>5.52E-08</td>
<td>1.24E-05</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Potential Emission of Total HAPs (tons/yr)</th>
<th>Potential Emission of Highest Single HAP (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>5.43E-06</td>
<td>1.48E-06</td>
</tr>
<tr>
<td>Toluene</td>
<td>1.97E-06</td>
<td>3.34E-04</td>
</tr>
<tr>
<td>Xylene</td>
<td>1.35E-06</td>
<td>3.48E-04</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>5.52E-07</td>
<td>1.24E-05</td>
</tr>
<tr>
<td>Acetaldehyde</td>
<td>1.76E-07</td>
<td>3.97E-05</td>
</tr>
<tr>
<td>Acrolein</td>
<td>5.52E-08</td>
<td>1.24E-05</td>
</tr>
</tbody>
</table>

**Methodology**

Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.4-1, 3.4-2, 3.4-3, and 3.4-4.

Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] * [Maximum Hours Operated per Year]

Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] * [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]
## Appendix A: Emission Calculations

### Dry Deburring

**Company Name:** FCA US LLC - Kokomo Casting Plant  
**Source Location:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit No./Plt ID:** T067-41599-00065  
**Reviewer:** Deena Levering

<table>
<thead>
<tr>
<th>Process</th>
<th>Number of Deburring Systems</th>
<th>Number of Stations Per System with Particulate Emissions*</th>
<th>Equivalent Air Flow Rate** (cfm)</th>
<th>Outlet Grain Loading (gr/dscf)</th>
<th>% of PM that is PM10</th>
<th>% of PM10 that is PM2.5</th>
<th>PM Control</th>
<th>Estimated Coolant Application*** (oz/hr)</th>
<th>Coolant VOC Emission Rate</th>
<th>Coolant Particulate Emission Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Deburring (Dry Deburr 1-7)</td>
<td>7</td>
<td>2</td>
<td>50</td>
<td>0.0044</td>
<td>10%</td>
<td>100%</td>
<td>0%</td>
<td>2.13</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Emissions**

<table>
<thead>
<tr>
<th>Emissions per Station</th>
<th>Emissions (lb/hr)</th>
<th>Emissions (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PM</td>
<td>PM10</td>
</tr>
<tr>
<td>Emissions per Station</td>
<td>0.002</td>
<td>0.0002</td>
</tr>
<tr>
<td>Total Emissions</td>
<td>0.026</td>
<td>0.003</td>
</tr>
</tbody>
</table>

**Methodology**

*Each deburring system consists of 6 stations. One station for each system is a mechanical robot that moves parts onto the line and no emissions are generated. One station is for drilling and tapping parts with no particulate generated. Two stations are for milling with no particulate generated. Two stations are for brushing, which have potential particulate emissions.

**An airflow rate of 50 cfm and a grain loading of 0.0044 gr/dscf is assumed for each station based on previously permitted dry machining operations. It is expected that the dry deburring operations will generate lesser quantities of particulate than the dry machining operations.

***A small amount of oil will be used for lubrication in the final drilling step. Manufacturer data for the drill press estimates that a maximum of 2.13 ounces of oil per hour will be used in the operations for each system. Based upon information from the equipment supplier, the Permittee is estimating that none of the lubricating oil would be emitted as VOC due to the low volatility of the only VOC in the oil (monoethanolamine). Additionally, the small amount of oil applied is expected to remain on the parts or chips. The oil does not contain any HAPs.

PTE PM (lb/hr) = Air Flow Rate (cfm) x Outlet Grain Loading (g/dscf) x (60 min/hr) x (1 lb/7000 gr)  
PTE PM10 (lb/hr) = PTE PM (lb/hr) x % of PM that is PM10  
PTE PM2.5 (lb/hr) = PTE PM10 (lb/hr) x % of PM10 that is PM2.5  
PTE VOC (lb/hr) = Estimated Coolant Application Rate (lb/hr) x % Emission Rate (as VOC)  
PTE (ton/yr) = PTE (lb/hr) x (8760 hr/yr) x (1 ton/2000 lb)
## Appendix A: Emission Calculations

### Wastewater Treatment Plant Operations

**Company Name:** FCA US LLC - Kokomo Casting Plant  
**Source Location:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit No./Plt ID:** T067-41599-00065  
**Reviewer:** Deena Levering

<table>
<thead>
<tr>
<th>Maximum WWTP Flow (gpd)</th>
<th>Influent Phenol Concentration (ppb)</th>
<th>Influent Phenol Concentration (lb/day)</th>
<th>Effluent Phenol Concentration (ppb)</th>
<th>Effluent Phenol Concentration (lb/day)</th>
<th>VOC/Phenol Emissions (lb/day)</th>
<th>VOC/Phenol Emissions (lb/hr)</th>
<th>VOC/Phenol Emissions (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>150000</td>
<td>50</td>
<td>0.0626</td>
<td>10</td>
<td>0.0125</td>
<td>0.0501</td>
<td>0.0021</td>
<td>0.0091</td>
</tr>
</tbody>
</table>

### Methodology

Concentration (lb/day) = Maximum WWTP Flow (gpd) x Concentration (ppb) x Water Density (8.35 lb/gal) / 1,000,000,000

VOC/Phenol Emissions (lb/day) = Influent Phenol Concentration (lb/day) - Effluent Phenol Concentration (lb/day)

VOC/Phenol Emissions (lb/hr) = VOC/Phenol Emissions (lb/day) x (1 day/24 hr)

VOC/Phenol Emissions (ton/yr) = VOC/Phenol Emissions (lb/hr) x (8760 hr/yr) x (1 ton/2000 lb)
December 23, 2019

Michael Henry
FCA US LLC Kokomo Casting Plant
1001 E Blvd
Kokomo, IN 46904

Re: Public Notice
Kokomo Casting Plant
Permit Level: Title V Renewal Administrative

Dear Michael Henry:

Enclosed is a copy of your draft Title V Renewal Administrative Permit, Technical Support Document, emission calculations, and the Public Notice.

The Public Notice period will begin the date the Notice is published on the IDEM Official Public Notice website. Publication has been requested and is expected within 2-3 business days. You may check the exact Public Notice begins and ends date here: https://www.in.gov/idem/5474.htm

Please note that as of April 17, 2019, IDEM is no longer required to publish the notice in a newspaper.

OAQ has submitted the draft permit package to the Kokomo Howard County Public Library, 220 N Union St in Kokomo IN 46901-4600. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Deena Levering, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 4-5400 or dial (317) 234-5400.

Sincerely,

L. Pogost

L. Pogost
Permits Branch
Office of Air Quality
December 23, 2019

To: Kokomo Howard County Public Library 220 N Union St Kokomo IN 46901-4600
(Library)

From: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

Subject: Important Information to Display Regarding a Public Notice for an Air Permit

Applicant Name: Kokomo Casting Plant
Permit Number: 067-41599-00065

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. Please make this information readily available until you receive a copy of the final package.

If you have any questions concerning this public review process, please contact Joanne Smiddle-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library updated 4/2019
Notice of Public Comment

December 23, 2019
Kokomo Casting Plant
067-41599-00065

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has posted on IDEM’s Public Notice website at https://www.in.gov/idem/5474.htm.

The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana’s Air Permitting Program.

Please Note: If you feel you have received this Notice 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. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.
<table>
<thead>
<tr>
<th>Line</th>
<th>Article Number</th>
<th>Name, Address, Street and Post Office Address</th>
<th>Postage</th>
<th>Handing Charges</th>
<th>Act. Value (If Registered)</th>
<th>Insured Value</th>
<th>Due Send if COD</th>
<th>R.R. Fee</th>
<th>S.D. Fee</th>
<th>S.H. Fee</th>
<th>Rest. Del. Fee</th>
<th>Remarks</th>
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<td>Michael Henry, FCA US LLC Kokomo Casting Plant 1001 E Blvd Kokomo IN 46904 (Source CAATS)</td>
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<td>David Dukes, Plant Manager FCA US LLC Kokomo Casting Plant 1001 E Blvd Kokomo IN 46904 (RO CAATS)</td>
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<td>3</td>
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<td>Kokomo City Council and Mayors Office City Hall, 100 S. Union Street Kokomo IN 46901 (Local Official)</td>
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<td>Kokomo Howard County Public Library 220 N Union St Kokomo IN 46901-4600 (Library)</td>
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<td>Howard County Commissioners 220 North Main Kokomo IN 46901-4624 (Local Official)</td>
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<td>Howard County Health Department 120 E. Mulberry St, Suite 206 Kokomo IN 46901-4657 (Health Department)</td>
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<td>Mr. Leslie Ellison, Howard County Council, District 3 408 East Mulberry Street Kokomo IN 46901 (Affected Party)</td>
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<td>Mr. William Prokopy, Chrysler LLC Regulatory Affairs 1001 East Boulevard Kokomo IN 46901 (Source addl contact)</td>
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<td></td>
<td>John Schneider, GZA GeoEnvironmental 19500 Victor Parkway - Suite 300 Livonia MI 48152 (Consultant)</td>
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The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50,000 per occurrence. The maximum indemnity payable on Express mail merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on insured and COD mail. See International Mail Manual for limitations on coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.