



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: October 20, 2011

RE: Keihin IPT Manufacturing, LLC / 059-29178-00013

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

Notice of Decision: Approval – Effective Immediately

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

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

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

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

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

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

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

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

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

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

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

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



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Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

**Keihin IPT Manufacturing, LLC
400 West New Road
Greenfield, Indiana 46140**

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

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

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

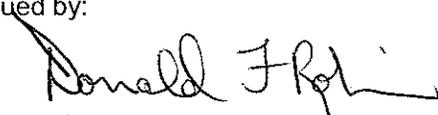
Operation Permit No.: T059-29178-00013	
Issued by:  Donald F. Robin, P.E., Section Chief Permits Branch Office of Air Quality	Issuance Date: October 20, 2011 Expiration Date: October 20, 2016

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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary stationary electronic fuel injection system for an automotive components manufacturing plant.

Source Address:	400 West New Road, Greenfield, Indiana 46140
General Source Phone Number:	(317) 462-3015
SIC Code:	3714
County Location:	Hancock
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD and Emission Offset Rules Major Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

(a) Aluminum furnaces consisting of:

- (1) Five (5) melt furnaces, identified as GDC-F #1 through GDC-F #5, processing aluminum ingots and flux, equipped with one 0.96 MMBtu/hr natural gas melt burner and one 0.055 MMBtu/hr natural gas holding burner each with a maximum throughput capacity of 1100 lbs per hour. GDC-F #1 and 2 were constructed in 1993, GDC-F #3 was constructed in 1996, and GDC-F #4 and GDC-F #5 were constructed in 1997. GDC-F #1 - #5 are controlled by baghouse #2 during fluxing, exhausting to stack EF101.
- (2) One (1) aluminum melt furnace, identified as the HPDC-T/B #1, constructed in 1991, equipped with one 2.5 MMBtu/hr natural gas melt burner and one 1.48 MMBtu/hr natural gas holding burner, with a maximum throughput capacity of 1,300 pounds of aluminum ingots and flux per hour, controlled by baghouse #4 and exhausting at stack EF120.
- (3) One (1) gas aluminum melt identified as the Large HPDC-2pc furnace, constructed in 2003, equipped with one 1.265 MMBtu/hr natural gas melt burner and one 1.091 MMBtu/hr natural gas holding burner, with a maximum throughput rate capacity of 1,500 pounds of aluminum ingots and flux per hour, controlled by a baghouse #4, and exhausting at stack EF120.
- (4) One (1) gas aluminum melt identified as the Small HPDC-6AT furnace, constructed in 2003, equipped with one 1.265 MMBtu/hr natural gas melt burner and one 1.091 MMBtu/hr natural gas holding burner, with a maximum throughput rate capacity of 1,500 pounds of aluminum ingots and flux per hour, controlled by a baghouse #4, and exhausting at stack EF120.

- (5) One (1) aluminum melt furnace, identified as the Small HPDC-VCM Striko furnace, constructed in 2006, with a maximum throughput capacity of 1,650 pounds of aluminum ingots per hour, with a 2.322 MMBtu/hr natural gas burner, and exhausting at stack EF75.
- (b) Unit 2 Aluminum facilities consisting of:
- (1) Six (6) shell core machines, identified as GDC-Shellcore #1 through #5 and NDC-Shellcore #10, constructed in 1988, each with a maximum throughput capacity of 228 pounds of sand per hour, controlled by a baghouse and exhausting at stack EF-49.
 - (2) Ten (10) gravity casting machines, identified as GDC-DC #1 through #10, constructed in 1988, each with a maximum throughput capacity of 594 pounds of metal and 157 pounds of sand per hour, respectively, exhausting inside the building and routed to the GDC baghouse through an overhead hood.
 - (3) Five (5) shakeout machines, Shakeout Machines GDC-SO #1 through GDC-SO #5, constructed in 1988, each with a maximum throughput capacity of 975 pounds of metal and 258 pounds of sand per hour, respectively, controlled by five (5) dust collectors, exhausting into the building.
 - (4) Three (3) SV Small HPDC-VCM die-casting machines, identified as VCM #1 through VCM #3, approved for construction in 2007, two installed in 2007, one installed in 2008, each with a maximum throughput capacity of 400 pounds of metal per hour, exhausting into the building.
 - (5) Four (4) aluminum die-casting machines, identified as HPDC-UBE#1 through HPDC-UBE#3 and HPDC-T, constructed in 1988, each with a maximum throughput capacity of 594 pounds of metal per hour, controlled by a baghouse.
- (c) Three (3) die-casting machines, identified as Mag HPDC #1 and Mag HPDC #2, approved in 2006 for construction, and Mag HPDC #3, approved in 2003 for construction, each with a maximum throughput capacity of 1,500 pounds of metal per hour.
- (d) One (1) shot blasting unit, installed in 2006, with a maximum throughput rate of 2.05 pounds of zinc shot per shift, with emissions controlled by a wet collector. This unit is referred to as the HPDC Small VCM Shot Blast. [326 IAC 6-3]
- (e) One (1) zinc shot blast machine, constructed in 2003, with a maximum blast rate of 2.0 pounds of abrasive per hour, with emissions controlled by a wet collector. This unit is referred to as the Small HPDC-T/B Shot Blast. [326 IAC 6-3]
- (f) Machining and washing processes, consisting of sixteen (16) injector component machines using Viscor and three (3) Napthal washers, identified as Unit 4, constructed in 1989, with a maximum throughput rate of 1.35 gallons of mineral spirits per hour, controlled by one thermal oxidizer.
- (g) Two (2) natural gas-fired boilers, identified as B-1 and B-2, installed in 1989 and 1999, respectively, each with a maximum heat input capacity of 10.46 MMBtu per hour, with emissions uncontrolled and exhausting at stacks B-1 and B-2.

Under NSPS 40 CFR 60, Subpart Dc, Unit B-2 is considered an existing affected unit.

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

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

- (a) An emission unit or activity whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(e)(1) or the exemption levels specified in the following, whichever is lower:
 - (1) For lead or lead compounds measured as elemental lead, the exemption level is six-tenths (0.6) ton per year or three and twenty-nine hundredths (3.29) pounds per day.
 - (2) For carbon monoxide (CO), the exemption limit is twenty-five (25) pounds per day.
 - (3) For sulfur dioxide, the exemption level is five (5) pounds per hour or twenty-five (25) pounds per day.
 - (4) For VOC, the exemption limit is three (3) pounds per hour or fifteen (15) pounds per day.
 - (5) For nitrogen oxides (NO_x), the exemption limit is five (5) pounds per hour or twenty-five (25) pounds per day.
 - (6) For an emission unit or activity with potential uncontrolled emissions of particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM₁₀), the exemption level is either five (5) pounds per hour or twenty-five (25) pounds per day.
- (A) One (1) High Pressure Die Casting (HPDC) machine, identified as HPDC #5, with a maximum throughput rate of 1,500 pounds of clean aluminum per hour, controlled by a baghouse EF-60, and exhausting at stack EF-60. This unit was constructed in 2003. [326 IAC 6-3]
- (B) Four (4) closed-system crucible magnesium melt furnaces with melting occurring under an inert gas, identified as Magnesium Furnace #1 and Magnesium Furnace #2, constructed in 2006, each with a maximum throughput capacity of 1000 pounds of magnesium ingots per hour, with emissions uncontrolled, Magnesium Furnace #3, approved for construction in 2007, with a maximum throughput capacity of 1400 pounds of magnesium ingots per hour, with emissions uncontrolled and Magnesium Furnace #4, approved for construction in 2008, with a maximum throughput capacity of 1540 pounds of magnesium ingots per hour, with emissions uncontrolled. [326 IAC 6-3]
- (C) Three (3) mineral spirits storage tanks, two with storage capacities of 2,000 gallons, and one with a storage capacity of 3,000 gallons. These units were constructed in 1989.
- (D) One (1) electrically heated T-6 machine to heat treat parts in the casting area with a maximum throughput rate of 15,000 pounds of water-phosphoric acid per year.
- (E) Sand storage warehouse storing sand used to create the cores.
- (F) Mister Collector collecting water based coolants/cutting oils from the aluminum machining area. The fugitive oils/coolant mists are drawn into an overhead system for collection.
- (G) Two (2) Small HPDC-6AT die-casting machines, identified as 6AT-1M/C and 6AT-2 M/C, each with a maximum throughput rate of 1,000 pounds

of clean aluminum per hour, exhausting into the building. These units were installed in 2011.

- (H) One (1) NDC casting machine, identified NDC II machine, with a maximum throughput rate of 1,500 pounds of clean aluminum per day, exhausting into the building. [326 IAC 6-3-2]
 - (I) Two (2) shot blasting units, installed in 2003, each with a maximum throughput rate of 1,000 pounds of glass beads per month, each with emissions controlled by a baghouse. These units are located in the Die Maintenance area. [326 IAC 6-3]
- (b) Paved and unpaved roads and parking lots with public access [326 IAC 6-4].
 - (c) Production related activities, including machining where an aqueous cutting coolant continuously floods the machining interface.
 - (1) Machining operations, some units equipped with a mist collector as control, and exhausting indoors. These units were constructed in 1989.
 - (d) The following VOC and HAP storage containers:
 - (1) Vessels storing the following: lubricating oils, hydraulic oils, machining oils, and machining fluids.
 - (e) Equipment used exclusively for the following:
 - (1) Filling drums, pails, or other packaging containers with the following: lubricating oils, waxes, or, greases.
 - (f) Production related activities, including the following:
 - (1) Application of oils, greases, lubricants, and nonvolatile material as temporary protective coatings.
 - (2) Machining where an aqueous cutting coolant continuously floods the machining interface.
 - (3) Closed loop heating and cooling systems.
 - (4) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, except if subject to 326 IAC 20-6.
 - (A) Degreasing operations, constructed in 1989, using an aqueous based cleaner with a maximum usage rate of 145 gallons per year. This is located in the machining area [326 IAC 8-3-2].
 - (5) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing, cutting torches, soldering, and welding.
 - (g) Water based activities, including the following:
 - (1) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.

- (2) Any operation using aqueous solutions containing less than or equal to one percent (1%) by weight of VOCs excluding HAPs.
- (3) Quenching operations used with heat treating processes.
- (h) Repair activities, including the following:
 - (1) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.
 - (2) Heat exchanger cleaning and repair.
- (i) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including the following: catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (j) Blow down for any of the following: sight glass, boiler, compressors, pumps and cooling tower.
- (k) Activities associated with emergencies, including the following:
 - (1) On-site fire training approved by the department.
 - (2) Two (2) stationary fire pumps, constructed in 1989, with a maximum capacity of 147.6 BPH and 139.6 BPH.

Under NESHAP 40 CFR 63, Subpart ZZZZ, these units are considered existing affected units.
- (l) Mold release agents using low volatile products (vapor pressure less than or equal to two (2) kilo Pascals measured at thirty-eight (38) degrees Centigrade).
- (m) Emissions from a laboratory as defined in 326 IAC 2-7-1(21).
- (n) Five (5) finishing lines with no associated emissions, identified as GDC-finishing lines #3,5,6,7 and 8, constructed in 1988.

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

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

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

SECTION B GENERAL CONDITIONS

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

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

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

- (a) This permit, T059-29178-00013, 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:

- (1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and
 - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
 - (c) A "responsible official" is defined at 326 IAC 2-7-1(34).

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

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

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

and

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

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

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

- (a) 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(34).

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(34).

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

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance 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(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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 T059-29178-00013 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

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

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or

anticipated noncompliance does not stay any condition of this permit.
[326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

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

final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, 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(34).

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

B.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),(c), or (e) without a prior permit revision, if each of the following conditions is met:

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

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

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

(4) The Permittee notifies the:

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

and

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

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

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

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

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

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (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(34).

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

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

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

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (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.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

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

The Permittee shall not operate an incinerator 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.5 Fugitive Dust Emissions [326 IAC 6-4]

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

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted 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.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least

thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to

thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

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

- (a) 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(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

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

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

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

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

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

C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system);
or

- (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

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

The statement must be submitted to:

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

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, 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.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported 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(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.19 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

FACILITY OPERATION CONDITIONS - Furnaces

Facility Description [326 IAC 2-7-5(15)]:

- (a) Aluminum furnaces consisting of:
- (1) Five (5) melt furnaces, identified as GDC-F #1 through GDC-F #5, processing aluminum ingots and flux, equipped with one 0.96 MMBtu/hr natural gas melt burner and one 0.055 MMBtu/hr natural gas holding burner each with a maximum throughput capacity of 1100 lbs per hour. GDC-F #1 and 2 were constructed in 1993, GDC-F #3 was constructed in 1996, and GDC-F #4 and GDC-F #5 were constructed in 1997. GDC-F #1 - #5 are controlled by baghouse #2 during fluxing, exhausting to stack EF101.
 - (2) One (1) aluminum melt furnace, identified as the HPDC-T/B #1, constructed in 1991, equipped with one 2.5 MMBtu/hr natural gas melt burner and one 1.48 MMBtu/hr natural gas holding burner, with a maximum throughput capacity of 1,300 pounds of aluminum ingots and flux per hour, controlled by baghouse #4 and exhausting at stack EF120.
 - (3) One (1) gas aluminum melt identified as the Large HPDC-2pc furnace, constructed in 2003, equipped with one 1.265 MMBtu/hr natural gas melt burner and one 1.091 MMBtu/hr natural gas holding burner, with a maximum throughput rate capacity of 1,500 pounds of aluminum ingots and flux per hour, controlled by a baghouse #4, and exhausting at stack EF120.
 - (4) One (1) gas aluminum melt identified as the Small HPDC-6AT furnace, constructed in 2003, equipped with one 1.265 MMBtu/hr natural gas melt burner and one 1.091 MMBtu/hr natural gas holding burner, with a maximum throughput rate capacity of 1,500 pounds of aluminum ingots and flux per hour, controlled by a baghouse #4, and exhausting at stack EF120.
 - (5) One (1) aluminum melt furnace, identified as the Small HPDC-VCM Striko furnace, constructed in 2006, with a maximum throughput capacity of 1,650 pounds of aluminum ingots per hour, with a 2.322 MMBtu/hr natural gas burner, and exhausting at stack EF75.

Insignificant Activities

- (a) An emission unit or activity whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(e)(1) or the exemption levels specified in the following, whichever is lower:
- (1) For lead or lead compounds measured as elemental lead, the exemption level is six-tenths (0.6) ton per year or three and twenty-nine hundredths (3.29) pounds per day.
 - (2) For carbon monoxide (CO), the exemption limit is twenty-five (25) pounds per day.
 - (3) For sulfur dioxide, the exemption level is five (5) pounds per hour or twenty-five (25) pounds per day.
 - (4) For VOC, the exemption limit is three (3) pounds per hour or fifteen (15) pounds per day.
 - (5) For nitrogen oxides (NO_x), the exemption limit is five (5) pounds per hour or twenty-five (25) pounds per day.
 - (6) For an emission unit or activity with potential uncontrolled emissions of particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM₁₀), the exemption level is either five (5) pounds per hour or twenty-five (25) pounds per day.

- (B) Four (4) closed-system crucible magnesium melt furnaces with melting occurring under an inert gas, identified as Magnesium Furnace #1 and Magnesium Furnace #2, constructed in 2006, each with a maximum throughput capacity of 1000 pounds of magnesium ingots per hour, with emissions uncontrolled, Magnesium Furnace #3, approved for construction in 2007, with a maximum throughput capacity of 1400 pounds of magnesium ingots per hour, with emissions uncontrolled and Magnesium Furnace #4, approved for construction in 2008, with a maximum throughput capacity of 1540 pounds of magnesium ingots per hour, with emissions uncontrolled. [326 IAC 6-3]

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

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

D.1.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of following operations shall not exceed the pound per hour limit listed in the table below:

Summary of Process Weight Rate Limits		
Process / Emission Unit	P (ton/hr)	E (lb/hr)
GDC-F #1	0.55	2.75
GDC-F #2	0.55	2.75
GDC-F #3	0.55	2.75
GDC-F #4	0.55	2.75
GDC-F #5	0.55	2.75
HPDC-T/B #1	0.65	3.07
HPDC-2pc furnace	0.75	3.38
Small HPDC-6AT	0.75	3.38
HPDC-VCM Striko furnace	0.83	3.60
Magnesium Furnace #1	0.55	2.75
Magnesium Furnace #2	0.55	2.75
Magnesium Furnace #3	0.70	3.23
Magnesium Furnace #4	0.77	3.44

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

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

D.1.2 Aluminum Processing Requirements [40 CFR 63.1500, Subpart RRR]

Pursuant to Second Minor Permit Revision 059-14848-00013 issued on November 8, 2001, the metal processed at the nine (9) aluminum furnaces (identified as GDC-F #1, GDC-F #2, GDC-F #3, GDC-F #4, GDC-F #5, HPDC-T/B #1, Large HPDC-2pc furnace, Small HPDC-6AT, and Small

HPDC-VCM Striko furnace) shall be clean aluminum only, where clean aluminum is defined as given below:

- (a) molten aluminum,
- (b) T-bar,
- (c) sow,
- (d) ingot,
- (e) billet,
- (f) pig,
- (g) alloying elements,
- (h) thermally dried aluminum chips,
- (i) aluminum scrap dried at 650 degree Fahrenheit or higher,
- (j) aluminum scrap delacquered/decoated at 900EF or higher,
- (k) other gates and risers,
- (l) aluminum scrap, shapes, and products, and
- (m) scrap material generated on-site by aluminum extruding, rolling, scalping, forging, forming/stamping, cutting, and trimming operations, dried at 650EF or higher or equivalent non-thermal drying process, that are oil- and lubricant-free, unpainted/uncoated, and have no undergone any processes that would cause contamination of the aluminum.

Compliance with these requirements render 40 CFR 63.1500, Subpart RRR not applicable.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.1.4 Particulate Control

- (a) In order to comply with Condition D.1.1, the baghouses for particulate control shall be in operation and control emissions from GDC-F #1, GDC-F #2, GDC-F #3, GDC-F #4, GDC-F #5, HPDC-T/B #1, Large HPDC-2pc furnace, and Small HPDC-6AT at all times that the units are fluxing.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.1.5 Visible Emissions Notations

- (a) In order to demonstrate compliance with Condition D.1.1, daily visible emission notations of the aluminum furnace stack exhausts/vents shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition.

D.1.6 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses used in conjunction with GDC-F #1, GDC-F #2, GDC-F #3, GDC-F #4, GDC-F #5, HPDC-T/B #1, Large HPDC-2pc furnace, Small HPDC-6AT furnace, and Small HPDC-VCM Striko furnace at least once per day when these facilities are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 7.0 inches of water, the Permittee shall take 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. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.1.7 Broken or Failed Bag Detection

- (a) For a single compartment baghouses 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 have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

D.1.8 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.2, the Permittee shall keep a one time signed certification from each metal supplier, stating that the metal supplied to Keihin IPT Manufacturing, Inc., qualifies as clean metal as defined in Condition D.1.2.
- (b) To document the compliance status with Condition D.1.5, the Permittee shall maintain a daily record of visible emission notations of the aluminum furnaces' 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) To document the compliance status with Condition D.1.6, the Permittee shall maintain a daily record of the pressure drop across the baghouses controlling the aluminum furnaces. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.2

FACILITY OPERATION CONDITIONS - Casting

Facility Description [326 IAC 2-7-5(15)]:

- (b) Unit 2 Aluminum facilities consisting of:
- (1) Six (6) shell core machines, identified as GDC-Shellcore #1 through #5 and NDC-Shellcore #10, constructed in 1988, each with a maximum throughput capacity of 228 pounds of sand per hour, controlled by a baghouse and exhausting at stack EF-49.
 - (2) Ten (10) gravity casting machines, identified as GDC-DC #1 through #10, constructed in 1988, each with a maximum throughput capacity of 594 pounds of metal and 157 pounds of sand per hour, respectively, exhausting inside the building and routed to the GDC baghouse through an overhead hood.
 - (3) Five (5) shakeout machines, Shakeout Machines GDC-SO #1 through GDC-SO #5, constructed in 1988, each with a maximum throughput capacity of 975 pounds of metal and 258 pounds of sand per hour, respectively, controlled by five (5) dust collectors, exhausting into the building.
 - (4) Three (3) SV Small HPDC-VCM die-casting machines, identified as VCM #1 through VCM #3, approved for construction in 2007, two installed in 2007, one installed in 2008, each with a maximum throughput capacity of 400 pounds of metal per hour, exhausting into the building.
 - (5) Four (4) aluminum die-casting machines, identified as HPDC-UBE#1 through HPDC-UBE#3 and HPDC-T, constructed in 1988, each with a maximum throughput capacity of 594 pounds of metal per hour, controlled by a baghouse.
- (d) Two (2) shot blasting units, installed in 2003, each with a maximum throughput rate of 1,000 pounds of glass beads per month, each with emissions controlled by a baghouse. These units are located in the Die Maintenance area. [326 IAC 6-3]
- (e) One (1) shot blasting unit, installed in 2006, with a maximum throughput rate of 2.05 pounds of zinc shot per shift, with emissions controlled by a wet collector. This unit is referred to as the HPDC Small VCM Shot Blast. [326 IAC 6-3]
- (f) One (1) zinc shot blast machine, constructed in 2003, with a maximum blast rate of 2.0 pounds of abrasive per hour, with emissions controlled by a wet collector. This unit is referred to as the Small HPDC-T/B Shot Blast. [326 IAC 6-3]

Insignificant Activities

- (a) An emission unit or activity whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(e)(1) or the exemption levels specified in the following, whichever is lower:
- (1) For lead or lead compounds measured as elemental lead, the exemption level is six-tenths (0.6) ton per year or three and twenty-nine hundredths (3.29) pounds per day.
 - (2) For carbon monoxide (CO), the exemption limit is twenty-five (25) pounds per day.
 - (3) For sulfur dioxide, the exemption level is five (5) pounds per hour or twenty-five (25) pounds per day.
 - (4) For VOC, the exemption limit is three (3) pounds per hour or fifteen (15) pounds per day.
 - (5) For nitrogen oxides (NO_x), the exemption limit is five (5) pounds per hour or twenty-five (25) pounds per day.

<p>(6) For an emission unit or activity with potential uncontrolled emissions of particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM10), the exemption level is either five (5) pounds per hour or twenty-five (25) pounds per day.</p> <p>(A) One (1) High Pressure Die Casting (HPDC) machine, identified as HPDC #5, with a maximum throughput rate of 1,500 pounds of clean aluminum per hour, controlled by a baghouse, and exhausting to a stack. This unit was constructed in 2003. [326 IAC 6-3]</p> <p>(H) One (1) NDC casting machine, identified NDC II machine, with a maximum throughput rate of 1,500 pounds of clean aluminum per day, exhausting into the building. [326 IAC 6-3-2]</p> <p>(I) Three (3) die-casting machines, identified as Mag HPDC #1 and Mag HPDC #2, approved in 2006 for construction, and Mag HPDC #3, approved in 2003 for construction, each with a maximum throughput capacity of 1,500 pounds of metal per hour.</p> <p>(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)</p>
--

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

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

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

Unit ID	Control	PM Limit (lb/hr)
HPDC Small VCM Shot Blast	wet collector	8.76
HPDC-T/B Shot Blast Machine	wet collector	8.76

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

D.2.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of following operations shall not exceed the pound per hour limit listed in the table below:

Summary of Process Weight Rate Limits		
Process / Emission Unit	P (ton/hr)	E (lb/hr)
GDC-SO #1	0.49	2.54
GDC-SO #2	0.49	2.54
GDC-SO #3	0.49	2.54
GDC-SO #4	0.49	2.54
GDC-SO #5	0.49	2.54
HPDC Small VCM Shot Blast	3.96	10.31
Small HPDC-T/B Shot Blast Machine	3.96	10.31

The pound per hour limit was calculated using the following equation:

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

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

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) In order to demonstrate compliance with Condition D.2.1 and D.2.2, the Permittee shall perform PM testing of the HPDC Small VCM Shot Blast wet collector or the Small HPDC-T/B Shot Blast Machine wet collector, no later than 180 days after issuance of Title V Operating Permit Renewal T059-29178-00013. This testing shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. The source will test the shot blaster wet collector for which the longest period of time has passed since the last valid compliance test. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
- (b) The Permittee shall perform uncontrolled PM, PM-10, and PM2.5 testing on one (1) unit from the group below, no later than 180 days after issuance of Title V Operating Permit Renewal T059-29178-00013. This testing shall be conducted utilizing methods as 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. PM-10 includes filterable and condensable PM.

Units

GDC-DC #1
GDC-DC #2
GDC-DC #3
GDC-DC #4
GDC-DC #5
GDC-DC #6
GDC-DC #7
GDC-DC #8
GDC-DC #9
GDC-DC #10

D.2.5 Particulate Matter (PM)

- (a) In order to comply with Condition D.2.2, the dust collectors for PM control shall be in operation and control emissions from GDC-SO #1 - #5 at all times that these processes are in operation.

- (b) In order to comply with Conditions D.2.1 and D.2.2, the wet collectors for PM control shall be in operation and control emissions from HPDC Small VCM Shot Blast, and Small HPDC T/B Shot Blast Machine at all times that these processes are in operation.
- (c) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.2.6 Visible Emissions Notations

- (a) Daily visible emission notations of the aluminum facility exhausts/vents shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition.

D.2.7 Parametric Monitoring (Baghouses)

The Permittee shall record the pressure drop across the baghouses/ dust collectors used in conjunction with GDC-SO #1 - #5 at least once per day when these facilities are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 7.0 inches of water or a range established during the latest stack test, the Permittee shall take 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. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.2.8 Parametric Monitoring (Wet Collectors) [40 CFR 64 (CAM)]

The Permittee shall record the pressure drop across the wet collectors used in conjunction with HPDC Small VCM Shot Blast and Small HPDC T/B Shot Blast Machine at least once per day when these facilities are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 5.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take 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. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.2.9 Broken or Failed Bag Detection

- (a) For a single compartment baghouses 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 have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse'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.

D.2.10 Scrubber Failure Detection

In the event that a scrubber’s failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps shall be considered a deviation from this permit.

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

D.2.11 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.6, the Permittee shall maintain a daily record of visible emission notations of the aluminum facilities' 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).

- (b) To document the compliance status with Condition D.2.7, the Permittee shall maintain a daily record of the pressure drop across the baghouses/dust collectors controlling the aluminum facilities. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (c) To document the compliance status with Condition D.2.8, the Permittee shall maintain a daily record of the pressure drop across the wet collectors controlling the shot blasters. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.3

FACILITY OPERATION CONDITIONS - Machining & Washing

Facility Description [326 IAC 2-7-5(15)]:

- (h) Machining and washing processes, consisting of sixteen (16) injector component machines using Viscor and three (3) Napthal washers, identified as Unit 4, constructed in 1989, with a maximum throughput rate of 1.35 gallons of mineral spirits per hour, controlled by one thermal oxidizer)

Insignificant Activities:

- (g) Production related activities, including the following:
- (4) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, except if subject to 326 IAC 20-6.
- (A) Degreasing operations, constructed in 1989, using an aqueous based cleaner with a maximum usage rate of 145 gallons per year. This is located in the machining area [326 IAC 8-3-2].

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

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

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, (New Facilities - General Reduction Requirements), and FESOP No. F059-9160-00013 issued, May 29, 1998, the Permittee shall operate the Durr thermal oxidizer at all times the mineral spirits machining and washing processes are in operation, except during periods (not to exceed 12 hours in duration at a time) in which VOC emissions are captured on the zeolite wheel for later desorption and destruction. The thermal incinerator shall maintain a minimum operating temperature, when in use, determined in the most recent valid compliance demonstration to maintain a minimum overall 85% destruction of VOC emissions.

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for the cold cleaning operations constructed after January 1, 1980, the Permittee shall:

- (1) Equip the cleaner with a cover;
- (2) Equip the cleaner with a facility for draining cleaned parts;
- (3) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (5) Provide a permanent, conspicuous label summarizing the operation requirements;
- (6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.3.4 Testing Requirements [326 IAC 2-7-6(1)][326 IAC 2-1.1-11]

The Permittee shall conduct a performance test to determine compliance with Condition D.3.1 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (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.

D.3.5 Thermal Oxidizer Temperature

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. For purposes of this condition, continuous means no less than one per fifteen (15) minutes. The output of this system shall be recorded every fifteen (15) minutes.
- (b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limit in Condition D.3.1.
- (c) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature as observed during the compliant stack test.

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

D.3.6 Parametric Monitoring

- (a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limits in Condition D.3.1.
- (b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer is in operation. On and after the date the stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

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

D.3.7 Record Keeping Requirements

- (a) To document the compliance status with Condition D.3.1, the Permittee shall keep records of the duration, startup, and shutdown periods for the zeolite wheel operation.
- (b) To document the compliance status with Conditions D.3.1 and D.3.5, the Permittee shall keep continuous temperature records (every fifteen (15) minutes) for the thermal oxidizer and maintain data in order to calculate the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test.
- (c) To document compliance with Condition D.3.6(b), the Permittee shall keep daily records of the duct pressure or fan amperage. The Permittee shall include in its daily record when a duct pressure or fan amperage reading is not taken and the reason for the lack of a duct pressure or fan amperage reading (e.g. the process did not operate that day).

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

SECTION D.4

FACILITY OPERATION CONDITIONS - Boilers

Facility Description [326 IAC 2-7-5(15)]:

- (i) Two (2) natural gas-fired boilers, identified as B-1 and B-2, installed in 1989 and 1999, respectively, each with a maximum heat input capacity of 10.46 MMBtu per hour, with emissions uncontrolled and exhausting at stacks B-1 and B-2.

Under NSPS 40 CFR 60, Subpart Dc, Unit B-2 is considered an existing affected unit.

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

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

D.4.1 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating), the PM emissions from the two (2) Cleaver Brooks boilers (identified as B-1 and B-2) shall not exceed 0.59 and 0.49 pounds per million British thermal units (lbs/MMBtu) of heat input, respectively.

These limitations are based on the following equation:

$$P_t = \frac{1.09}{Q^{0.26}}$$

Where P_t = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour heat input. The total source maximum heat input capacity is 10.461 MMBtu/hour for B-1 and 20.922 MMBtu/hour for B-2

SECTION E.1 NEW SOURCE PERFORMANCE STANDARDS FOR SMALL INDUSTRIAL-COMMERCIAL-INSTITUTIONAL STEAM GENERATING UNITS (40 CFR 60, Subpart Dc)

Facility Description [326 IAC 2-7-5(15)]:

- (i) Two (2) natural gas-fired boilers, identified as B-1 and B-2, installed in 1989 and 1999, respectively, each with a maximum heat input capacity of 10.46 MMBtu per hour, with emissions uncontrolled and exhausting at stacks B-1 and B-2.

Under NSPS 40 CFR 60, Subpart Dc, Unit B-2 is considered an existing affected unit.

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

E.1.1 General Provisions Relating to the NSPS for Small Industrial-Commercial-Institutional Steam Generating Units [326 IAC 12-1] [40 CFR 60, Subpart A]

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1-1 for Small Industrial-Commercial-Institutional Steam Generating Units as specified in 40 CFR 60, Subpart Dc.
- (b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

E.1.2 NSPS for Small Industrial-Commercial-Institutional Steam Generating Units Requirements [40 CFR 60, Subpart Dc]

Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall comply with the provisions of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units (included as attachment A of this permit), as specified as follows:

- (1) 40 CFR 60.40c (a)
(2) 40 CFR 60.41c
(3) 40 CFR 60.48c (a), (g)(2), (i), and (j)

SECTION E.2 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES (40 CFR 63, Subpart ZZZZ)

Facility Description [326 IAC 2-7-5(15)]:

Insignificant Activities

- (1) Activities associated with emergencies, including the following:
- (2) Two (2) stationary fire pumps, constructed in 1989, with a maximum capacity of 147.6 BPH and 139.6 BPH.
- Under NESHAP 40 CFR 63, Subpart ZZZZ, these units are considered existing affected units.

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

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

- (a) Pursuant to 40 CFR 63.6665, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, as specified in 40 CFR Part 63, Subpart ZZZZ in accordance with schedule in 40 CFR 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

and

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

E.2.2 Stationary Reciprocating Internal Combustion Engines NESHAP [326 IAC 20-82][40 CFR Part 63, Subpart ZZZZ]

The Permittee which have stationary reciprocating internal combustion engines with the following provisions of 40 CFR 63, Subpart ZZZZ (included as Attachment B of this permit), as specified as follows:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585 (a), (b), and (d)
- (3) 40 CFR 63.6590 (a)(1)(i), (ii), and (iv)
- (4) 40 CFR 63.6595 (a) and (c)
- (5) 40 CFR 63.6602
- (6) 40 CFR 63.6605
- (7) 40 CFR 63.6625 (f) and (j)
- (8) 40 CFR 63.6630 (c)
- (9) 40 CFR 63.6635

- (10) 40 CFR 63.6640 (a), (b), and (f)(1)
- (11) 40 CFR 63.6645 (a)(5) and (d)
- (12) 40 CFR 63.6655 (a)(1), (2), (4), (b), (d), (e)(2), and (f)
- (13) 40 CFR 63.6660
- (14) 40 CFR 63.6665
- (15) 40 CFR 63.6670
- (16) 40 CFR 63.6675
- (17) Table 2c - Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE \leq 500 HP Located at a Major Source of HAP Emissions
- (18) Table 6 - Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices
- (19) Table 8 - Applicability of General Provisions to Subpart ZZZZ

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

Source Name: Keihin IPT Manufacturing, LLC
Source Address: 400 West New Road, Greenfield, Indiana 46140
Part 70 Permit No.: T059-29178-00013

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

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

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Keihin IPT Manufacturing, LLC
Source Address: 400 West New Road, Greenfield, Indiana 46140
Part 70 Permit No.: T059-29178-00013

This form consists of 2 pages

Page 1 of 2

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

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

**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: Keihin IPT Manufacturing, LLC
 Source Address: 400 West New Road, Greenfield, Indiana 46140
 Part 70 Permit No.: T059-29178-00013

Months: _____ to _____ Year: _____

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

**Indiana Department of Environmental Management
Office of Air Quality**

**Attachment A
to a Part 70 Operating Permit Renewal**

Source Background and Description

Source Name:	Keihin IPT Manufacturing, LLC
Source Location:	400 West New Road, Greenfield, IN 46140
County:	Hancock
SIC Code:	3714
Permit Renewal No.:	T059-29178-00013
Permit Reviewer:	Kristen Willoughby

Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Source: 72 FR 32759, June 13, 2007, unless otherwise noted.

§ 60.40c Applicability and delegation of authority.

(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

(c) Steam generating units that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO₂) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in §60.41c.

(d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under §60.14.

(e) Heat recovery steam generators that are associated with combined cycle gas turbines and meet the applicability requirements of subpart KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/hr) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/hr) heat input of fossil fuel. If the heat recovery steam generator is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The gas turbine emissions are subject to subpart GG or KKKK, as applicable, of this part).

(f) Any facility covered by subpart AAAA of this part is not subject by this subpart.

(g) Any facility covered by an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not subject by this subpart.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009]

§ 60.41c Definitions.

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

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal not meeting the definition of natural gas, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Cogeneration steam generating unit means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (*i.e.* , the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17) or diesel fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see §60.17).

Dry flue gas desulfurization technology means a SO₂ control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO₂ control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under §60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means:

- (1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or
- (2) Liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17); or
- (3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO₂ emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or heats any heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Wet flue gas desulfurization technology means an SO₂ control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO₂.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009]

§ 60.42c Standard for sulfur dioxide (SO₂).

(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO₂ emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO₂ emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of the emission limit is determined pursuant to paragraph (e)(2) of this section.

(b) Except as provided in paragraphs (c) and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that:

(1) Combusts only coal refuse alone in a fluidized bed combustion steam generating unit shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO₂ emission rate (80 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of SO₂ in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is fired with coal refuse, the affected facility subject to paragraph (a) of this section. If oil or any other fuel (except coal) is fired with coal refuse, the affected facility is subject to the 87 ng/J (0.20 lb/MMBtu) heat input SO₂ emissions limit or the 90 percent SO₂ reduction requirement specified in paragraph (a) of this section and the emission limit is determined pursuant to paragraph (e)(2) of this section.

(2) Combusts only coal and that uses an emerging technology for the control of SO₂ emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 50 percent (0.50) of the potential SO₂ emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 260 ng/J (0.60 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent

SO₂ reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) of this section.

(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of the emission limit determined pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under paragraphs (c)(1), (2), (3), or (4).

(1) Affected facilities that have a heat input capacity of 22 MW (75 MMBtu/hr) or less.

(2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.

(3) Affected facilities located in a noncontinental area.

(4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.

(d) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 215 ng/J (0.50 lb/MMBtu) heat input; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

(e) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of the following:

(1) The percent of potential SO₂ emission rate or numerical SO₂ emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that

(i) Combusts coal in combination with any other fuel;

(ii) Has a heat input capacity greater than 22 MW (75 MMBtu/hr); and

(iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and

(2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$E_s = \frac{(K_a H_a + K_b H_b + K_c H_c)}{(H_a + H_b + H_c)}$$

Where:

E_s = SO₂ emission limit, expressed in ng/J or lb/MMBtu heat input;

K_a = 520 ng/J (1.2 lb/MMBtu);

$K_b = 260 \text{ ng/J (0.60 lb/MMBtu)}$;

$K_c = 215 \text{ ng/J (0.50 lb/MMBtu)}$;

H_a = Heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [MMBtu];

H_b = Heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (MMBtu); and

H_c = Heat input from the combustion of oil, in J (MMBtu).

(f) Reduction in the potential SO_2 emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:

- (1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO_2 emission rate; and
- (2) Emissions from the pretreated fuel (without either combustion or post-combustion SO_2 control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section.

(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis.

(h) For affected facilities listed under paragraphs (h)(1), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under §60.48c(f), as applicable.

- (1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).
- (2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).
- (3) Coal-fired facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(i) The SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(j) For affected facilities located in noncontinental areas and affected facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009]

§ 60.43c Standard for particulate matter (PM).

(a) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

- (1) 22 ng/J (0.051 lb/MMBtu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal with other fuels, has an annual capacity factor for the other fuels greater than 10 percent (0.10), and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(b) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:

(1) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood greater than 30 percent (0.30); or

(2) 130 ng/J (0.30 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood of 30 percent (0.30) or less.

(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that can combust coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Owners and operators of an affected facility that elect to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and are subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less are exempt from the opacity standard specified in this paragraph.

(d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

(e)(1) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input, except as provided in paragraphs (e)(2), (e)(3), and (e)(4) of this section.

(2) As an alternative to meeting the requirements of paragraph (e)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:

(i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and

(ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

(3) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(4) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, an owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50

weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under §60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO₂ emissions is not subject to the PM limit in this section.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

§ 60.44c Compliance and performance test methods and procedures for sulfur dioxide.

(a) Except as provided in paragraphs (g) and (h) of this section and §60.8(b), performance tests required under §60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in §60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(b) The initial performance test required under §60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO₂ emission limits under §60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.

(c) After the initial performance test required under paragraph (b) of this section and §60.8, compliance with the percent reduction requirements and SO₂ emission limits under §60.42c is based on the average percent reduction and the average SO₂ emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO₂ emission rate are calculated to show compliance with the standard.

(d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 of appendix A of this part are used to determine the hourly SO₂ emission rate (E_{ho}) and the 30-day average SO₂ emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the CEMS. Method 19 of appendix A of this part shall be used to calculate E_{ao} when using daily fuel sampling or Method 6B of appendix A of this part.

(e) If coal, oil, or coal and oil are combusted with other fuels:

(1) An adjusted E_{ho} (E_{ho0}) is used in Equation 19–19 of Method 19 of appendix A of this part to compute the adjusted E_{ao} (E_{ao0}). The E_{ho0} is computed using the following formula:

$$E_{ho0} = \frac{E_{ho} - E_w(1 - X_k)}{X_k}$$

Where:

E_{ho0} = Adjusted E_{ho}, ng/J (lb/MMBtu);

E_{ho} = Hourly SO₂ emission rate, ng/J (lb/MMBtu);

E_w = SO₂ concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of appendix A of this part, ng/J (lb/MMBtu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume E_w = 0.

X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(2) The owner or operator of an affected facility that qualifies under the provisions of §60.42c(c) or (d) (where percent reduction is not required) does not have to measure the parameters E_w or X_k if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19 of appendix A of this part.

(f) Affected facilities subject to the percent reduction requirements under §60.42c(a) or (b) shall determine compliance with the SO_2 emission limits under §60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential SO_2 emission rate is computed using the following formula:

$$\%P_s = 100 \left(1 - \frac{\%R_g}{100} \right) \left(1 - \frac{\%R_f}{100} \right)$$

Where:

$\%P_s$ = Potential SO_2 emission rate, in percent;

$\%R_g$ = SO_2 removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

$\%R_f$ = SO_2 removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

(2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:

(i) To compute the $\%P_s$, an adjusted $\%R_g$ ($\%R_{gO}$) is computed from E_{aoO} from paragraph (e)(1) of this section and an adjusted average SO_2 inlet rate (E_{aiO}) using the following formula:

$$\%R_{gO} = 100 \left(1 - \frac{E_{aoO}}{E_{aiO}} \right)$$

Where:

$\%R_{gO}$ = Adjusted $\%R_g$, in percent;

E_{aoO} = Adjusted E_{ao} , ng/J (lb/MMBtu); and

E_{aiO} = Adjusted average SO_2 inlet rate, ng/J (lb/MMBtu).

(ii) To compute E_{aiO} , an adjusted hourly SO_2 inlet rate (E_{hiO}) is used. The E_{hiO} is computed using the following formula:

$$E_{hiO} = \frac{E_{hi} - E_w(1 - X_1)}{X_1}$$

Where:

E_{hiO} = Adjusted E_{hi} , ng/J (lb/MMBtu);

E_{hi} = Hourly SO_2 inlet rate, ng/J (lb/MMBtu);

E_w = SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume $E_w = 0$; and

X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under §60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under §60.46c(d)(2).

(h) For affected facilities subject to §60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in §60.48c(f), as applicable.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO_2 standards under §60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(j) The owner or operator of an affected facility shall use all valid SO_2 emissions data in calculating $\%P_s$ and E_{ho} under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under §60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating $\%P_s$ or E_{ho} pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

§ 60.45c Compliance and performance test methods and procedures for particulate matter.

(a) The owner or operator of an affected facility subject to the PM and/or opacity standards under §60.43c shall conduct an initial performance test as required under §60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods, except as specified in paragraph (c) of this section.

(1) Method 1 of appendix A of this part shall be used to select the sampling site and the number of traverse sampling points.

(2) Method 3A or 3B of appendix A–2 of this part shall be used for gas analysis when applying Method 5 or 5B of appendix A–3 of this part or 17 of appendix A–6 of this part.

(3) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:

(i) Method 5 of appendix A of this part may be used only at affected facilities without wet scrubber systems.

(ii) Method 17 of appendix A of this part may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections

8.1 and 11.1 of Method 5B of appendix A of this part may be used in Method 17 of appendix A of this part only if Method 17 of appendix A of this part is used in conjunction with a wet scrubber system. Method 17 of appendix A of this part shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part may be used in conjunction with a wet scrubber system.

(4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(5) For Method 5 or 5B of appendix A of this part, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 160 ± 14 °C (320 ± 25 °F).

(6) For determination of PM emissions, an oxygen (O₂) or carbon dioxide (CO₂) measurement shall be obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

(7) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rates expressed in ng/J (lb/MMBtu) heat input shall be determined using:

(i) The O₂ or CO₂ measurements and PM measurements obtained under this section, (ii) The dry basis F factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.

(8) Method 9 of appendix A–4 of this part shall be used for determining the opacity of stack emissions.

(b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under §60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(c) In place of PM testing with Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(14) of this section.

(1) Notify the Administrator 1 month before starting use of the system.

(2) Notify the Administrator 1 month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with §60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under §60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS

specified in paragraph (d) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.

(6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.

(7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraph (c)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) [Reserved]

(8) The 1-hour arithmetic averages required under paragraph (c)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part.

(9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (c)(7) of this section are not met.

(10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.

(11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O₂ (or CO₂) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and performance tests conducted using the following test methods.

(i) For PM, Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall be used; and

(ii) For O₂ (or CO₂), Method 3A or 3B of appendix A-2 of this part, as applicable shall be used.

(12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.

(13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.

(14) After July 1, 2011, within 90 days after the date of completing each performance evaluation required by paragraph (c)(11) of this section, the owner or operator of the affected facility must either submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at <http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main> or mail a copy to: United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; Mail Code: D243-01; RTP, NC 27711.

(d) The owner or operator of an affected facility seeking to demonstrate compliance under §60.43c(e)(4) shall follow the applicable procedures under §60.48c(f). For residual oil-fired affected facilities, fuel supplier certifications are only allowed for facilities with heat input capacities between 2.9 and 8.7 MW (10 to 30 MMBtu/hr).

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011]

§ 60.46c Emission monitoring for sulfur dioxide.

(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO₂ emission limits under §60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO₂ concentrations and either O₂ or CO₂ concentrations at the outlet of the SO₂ control device (or the outlet of the steam generating unit if no SO₂ control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under §60.42c shall measure SO₂ concentrations and either O₂ or CO₂ concentrations at both the inlet and outlet of the SO₂ control device.

(b) The 1-hour average SO₂ emission rates measured by a CEMS shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.42c. Each 1-hour average SO₂ emission rate must be based on at least 30 minutes of operation, and shall be calculated using the data points required under §60.13(h)(2). Hourly SO₂ emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.

(c) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.

(2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.

(3) For affected facilities subject to the percent reduction requirements under §60.42c, the span value of the SO₂ CEMS at the inlet to the SO₂ control device shall be 125 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted, and the span value of the SO₂ CEMS at the outlet from the SO₂ control device shall be 50 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted.

(4) For affected facilities that are not subject to the percent reduction requirements of §60.42c, the span value of the SO₂ CEMS at the outlet from the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) shall be 125 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂ emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂ emission rate by using Method 6B of appendix A of this part. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B of appendix A of this part shall be conducted pursuant to paragraph (d)(3) of this section.

(1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according to the Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO₂ input rate.

(2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

(3) Method 6B of appendix A of this part may be used in lieu of CEMS to measure SO₂ at the inlet or outlet of the SO₂ control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of

this part sampling location. The stratification test shall consist of three paired runs of a suitable SO₂ and CO₂ measurement train operated at the candidate location and a second similar train operated according to the procedures in §3.2 and the applicable procedures in section 7 of Performance Specification 2 of appendix B of this part. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to §60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, as described under §60.48c(f), as applicable.

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

§ 60.47c Emission monitoring for particulate matter.

(a) Except as provided in paragraphs (c), (d), (e), (f), and (g) of this section, the owner or operator of an affected facility combusting coal, oil, or wood that is subject to the opacity standards under §60.43c shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard in §60.43c(c) that is not required to use a COMS due to paragraphs (c), (d), (e), or (f) of this section that elects not to use a COMS shall conduct a performance test using Method 9 of appendix A-4 of this part and the procedures in §60.11 to demonstrate compliance with the applicable limit in §60.43c by April 29, 2011, within 45 days of stopping use of an existing COMS, or 180 days after initial startup of the facility, whichever is later, and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. The observation period for Method 9 of appendix A-4 of this part performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.

(1) Except as provided in paragraph (a)(2) and (a)(3) of this section, the owner or operator shall conduct subsequent Method 9 of appendix A-4 of this part performance tests using the procedures in paragraph (a) of this section according to the applicable schedule in paragraphs (a)(1)(i) through (a)(1)(iv) of this section, as determined by the most recent Method 9 of appendix A-4 of this part performance test results.

(i) If no visible emissions are observed, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted;

(ii) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted;

(iii) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted; or

(iv) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.

(2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix

A-4 of this part performance tests, elect to perform subsequent monitoring using Method 22 of appendix A-7 of this part according to the procedures specified in paragraphs (a)(2)(i) and (ii) of this section.

(i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A-7 of this part and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (*i.e.* , 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (*i.e.*, 90 seconds per 30 minute period), the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (*i.e.*, 90 seconds) or conduct a new Method 9 of appendix A-4 of this part performance test using the procedures in paragraph (a) of this section within 45 calendar days according to the requirements in §60.45c(a)(8).

(ii) If no visible emissions are observed for 30 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.

(3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS "Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems." This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.

(b) All COMS shall be operated in accordance with the applicable procedures under Performance Specification 1 of appendix B of this part. The span value of the opacity COMS shall be between 60 and 80 percent.

(c) Owners and operators of an affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J (0.060 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO₂ or PM emissions and that are subject to an opacity standard in §60.43c(c) are not required to operate a COMS if they follow the applicable procedures in §60.48c(f).

(d) Owners or operators complying with the PM emission limit by using a PM CEMS must calibrate, maintain, operate, and record the output of the system for PM emissions discharged to the atmosphere as specified in §60.45c(c). The CEMS specified in paragraph §60.45c(c) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(e) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO₂, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur, and is operated such that emissions of CO discharged to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis is not required to operate a COMS. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (e)(1) through (4) of this section; or

(1) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (e)(1)(i) through (iv) of this section.

(i) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in §60.58b(i)(3) of subpart Eb of this part.

(ii) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(iii) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. The 1-hour averages are calculated using the data points required in §60.13(h)(2).

(iv) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.

(2) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.

(3) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(4) You must record the CO measurements and calculations performed according to paragraph (e) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(f) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that uses a bag leak detection system to monitor the performance of a fabric filter (baghouse) according to the most recent requirements in section §60.48Da of this part is not required to operate a COMS.

(g) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the permitting authority is not required to operate a COMS. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011]

§ 60.48c Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by §60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit

additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO₂ emission limits of §60.42c, or the PM or opacity limits of §60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part.

(c) In addition to the applicable requirements in §60.7, the owner or operator of an affected facility subject to the opacity limits in §60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in paragraphs (c)(1) through (3) of this section, as applicable to the visible emissions monitoring method used.

(1) For each performance test conducted using Method 9 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(1)(i) through (iii) of this section.

(i) Dates and time intervals of all opacity observation periods;

(ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

(iii) Copies of all visible emission observer opacity field data sheets;

(2) For each performance test conducted using Method 22 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(2)(i) through (iv) of this section.

(i) Dates and time intervals of all visible emissions observation periods;

(ii) Name and affiliation for each visible emission observer participating in the performance test;

(iii) Copies of all visible emission observer opacity field data sheets; and

(iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.

(3) For each digital opacity compliance system, the owner or operator shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator

(d) The owner or operator of each affected facility subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall submit reports to the Administrator.

(e) The owner or operator of each affected facility subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

(1) Calendar dates covered in the reporting period.

(2) Each 30-day average SO₂ emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent of potential SO₂ emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.

(4) Identification of any steam generating unit operating days for which SO₂ or diluent (O₂ or CO₂) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.

(5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

(6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

(7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.

(8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.

(9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of appendix B of this part.

(10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.

(11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

(f) Fuel supplier certification shall include the following information:

(1) For distillate oil:

(i) The name of the oil supplier;

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c; and

(iii) The sulfur content or maximum sulfur content of the oil.

(2) For residual oil:

(i) The name of the oil supplier;

(ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;

(iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and

(iv) The method used to determine the sulfur content of the oil.

(3) For coal:

(i) The name of the coal supplier;

(ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was

collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);

(iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(iv) The methods used to determine the properties of the coal.

(4) For other fuels:

(i) The name of the supplier of the fuel;

(ii) The potential sulfur emissions rate or maximum potential sulfur emissions rate of the fuel in ng/J heat input; and

(iii) The method used to determine the potential sulfur emissions rate of the fuel.

(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO₂ standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in §60.42C to use fuel certification to demonstrate compliance with the SO₂ standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

(h) The owner or operator of each affected facility subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under §60.42c or §60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

**Indiana Department of Environmental Management
Office of Air Quality**

**Attachment B
to a Part 70 Operating Permit Renewal**

Source Background and Description

Source Name:	Keihin IPT Manufacturing, LLC
Source Location:	400 West New Road, Greenfield, IN 46140
County:	Hancock
SIC Code:	3714
Permit Renewal No.:	T059-29178-00013
Permit Reviewer:	Kristen Willoughby

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

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

What This Subpart Covers

§ 63.6580 What is the purpose of subpart ZZZZ?

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

[73 FR 3603, Jan. 18, 2008]

§ 63.6585 Am I subject to this subpart?

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

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

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

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

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

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

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

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

This subpart applies to each affected source.

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

(1) *Existing stationary RICE.*

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Emission and Operating Limitations

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

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

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

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

(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

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

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

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

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

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

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

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

[75 FR 51589, Aug. 20, 2010]

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

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

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you.

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

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010]

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

If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. Existing non-emergency CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or at area sources in areas of Alaska not accessible by the FAHS are exempt from the requirements of this section.

[75 FR 51589, Aug. 20, 2010]

General Compliance Requirements

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

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

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

[75 FR 9675, Mar. 3, 2010]

Testing and Initial Compliance Requirements

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

§ 63.6615 When must I conduct subsequent performance tests?

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

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

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

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

(c) [Reserved]

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

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

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

Where:

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

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

R = percent reduction of CO or formaldehyde emissions.

(2) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (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:

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

Where:

F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO₂ 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 CO₂ produced to the gross calorific value of the fuel from Method 19, dsm³ / J (dscf/10⁶ Btu).

(ii) Calculate the CO₂ correction factor for correcting measurement data to 15 percent oxygen, as follows:

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

Where:

X_{co2} = CO₂ correction factor, percent.

5.9 = 20.9 percent O₂ - 15 percent O₂, the defined O₂ correction value, percent.

(iii) Calculate the NO_x and SO₂ gas concentrations adjusted to 15 percent O₂ using CO₂ as follows:

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

Where:

%CO₂ = Measured CO₂ 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 oxygen or CO₂ at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of this section.

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

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

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

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent 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 (5) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.

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

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

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

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

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

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

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

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

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

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

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

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

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

- (1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;
- (2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;
- (3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;
- (4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;
- (5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;
- (6) An existing non-emergency, non-black start landfill or digester gas stationary RICE located at an area source of HAP emissions;
- (7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;
- (8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;
- (9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and
- (10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.

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

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

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

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

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

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

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

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

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

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

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

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

Continuous Compliance Requirements

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

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

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

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

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

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

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

(c) [Reserved]

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

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

(f) *Requirements for emergency stationary RICE.* (1) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and

testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

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

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

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

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

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

(iii) You may operate your emergency stationary RICE for an additional 50 hours per year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010]

Notifications, Reports, and Records

§ 63.6645 What notifications must I submit and when?

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

- (1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.
 - (2) An existing stationary RICE located at an area source of HAP emissions.
 - (3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.
 - (4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.
 - (5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.
- (b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.
- (c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.
- (d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.
- (e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.
- (f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).
- (g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).
- (h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).
- (1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.
 - (2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

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

§ 63.6650 What reports must I submit and when?

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

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

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

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

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

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

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

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

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

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

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

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

(1) Company name and address.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

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

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

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

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

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

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

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

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

§ 63.6655 What records must I keep?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

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

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

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010]

§ 63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

Other Requirements and Information

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

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

[75 FR 9678, Mar. 3, 2010]

§ 63.6670 Who implements and enforces this subpart?

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

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

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

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

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

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

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

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

§ 63.6675 What definitions apply to this subpart?

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

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

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

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

CAA means the Clean Air Act (42 U.S.C. 7401 *et seq.*, as amended by Public Law 101-549, 104 Stat. 2399).

Commercial emergency stationary RICE means an emergency stationary RICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor's offices, and sports and performing arts facilities.

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

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

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

- (1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.
- (4) Fails to satisfy the general duty to minimize emissions established by §63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties (e.g. biodiesel) that is suitable for use in compression ignition engines.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and 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 internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc. Stationary RICE used for peak shaving are not considered emergency stationary RICE. Stationary RICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under §63.6640(f). All emergency stationary RICE must comply with the requirements specified in §63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in §63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

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

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

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

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

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

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

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

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

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and 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 (NO_x) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_x, CO, and volatile organic compounds (VOC) into 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 fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

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

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

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

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

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

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

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C₃H₈.

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

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

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

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

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

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary

RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart P of this part, that tests stationary RICE.

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

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

Subpart means 40 CFR part 63, subpart ZZZZ.

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

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

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

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:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 4SRB stationary RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. ¹
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂	

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

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

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

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

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

For each . . .	You must meet the following operating limitation . . .
1. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or	a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂ and using NSCR; or	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.
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd or less at 15 percent O ₂ and using NSCR.	
2. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or	Comply with any operating limitations approved by the Administrator.
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂ and not using NSCR; or	
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd or less at 15 percent O ₂ and using NSCR.	

[75 FR 51592, Aug. 20, 2010]

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

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

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O ₂ . If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O ₂ until June 15, 2007	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. ¹
2. 4SLB stationary	a. Reduce CO emissions by 93 percent or more; or	

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
RICE		
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O ₂	
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O ₂	

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

[75 FR 9680, Mar. 3, 2010]

Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions, Existing Compression Ignition Stationary RICE >500 HP, and Existing 4SLB Stationary RICE >500 HP Located at an Area Source of HAP Emissions

As stated in §§63.6600, 63.6601, 63.6603, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed 2SLB and compression ignition stationary RICE located at a major source of HAP emissions; new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions; existing compression ignition stationary RICE >500 HP; and existing 4SLB stationary RICE >500 HP located at an area source of HAP emissions that operate more than 24 hours per calendar year:

For each . . .	You must meet the following operating limitation . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. ¹
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst	Comply with any operating limitations approved by the Administrator.

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

[75 FR 51593, Aug. 20, 2010]

Table 2cto Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE ≤500 HP Located at a Major Source of HAP Emissions

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

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Emergency stationary CI RICE and black start stationary CI RICE. ¹	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ² b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. ³	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. ³
2. Non-Emergency, non-black start stationary CI RICE <100 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first; ²	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. ³	
3. Non-Emergency, non-black start CI stationary RICE 100≤HP≤300 HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O ₂	
4. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O ₂ ; or	
	b. Reduce CO emissions by 70 percent or more.	
5. Non-Emergency, non-black start stationary CI RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O ₂ ; or	
	b. Reduce CO emissions by 70 percent or more.	
6. Emergency stationary SI RICE and black start stationary SI RICE. ¹	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ²	
	b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first;	

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 500 hours of operation or annually, whichever comes first, and replace as necessary. ³	
7. Non-Emergency, non-black start stationary SI RICE <100 HP that are not 2SLB stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; ²	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary. ³	
8. Non-Emergency, non-black start 2SLB stationary SI RICE <100 HP	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; ²	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary. ³	
9. Non-emergency, non-black start 2SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O ₂	
10. Non-emergency, non-black start 4SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd or less at 15 percent O ₂	
11. Non-emergency, non-black start 4SRB stationary RICE 100≤HP≤500	Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O ₂	
12. Non-emergency, non-black start landfill or digester gas-fired stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O ₂	

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) 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.

[75 FR 51593, Aug. 20, 2010]

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:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Non-Emergency, non-black start CI stationary RICE ≤300 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first; ¹	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
2. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O ₂ ; or	
	b. Reduce CO emissions by 70 percent or more.	
3. Non-Emergency, non-black start CI stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O ₂ ; or	
	b. Reduce CO emissions by 70 percent or more.	
4. Emergency stationary CI RICE and black start stationary CI RICE. ²	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ¹	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually,	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	whichever comes first, and replace as necessary.	
5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year. ²	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ¹ b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
6. Non-emergency, non-black start 2SLB stationary RICE	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; ¹	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.	
7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; ¹	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
8. Non-emergency, non-black start 4SLB stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd at 15 percent O ₂ ; or	
	b. Reduce CO emissions by 93 percent or more.	
9. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	operation or annually, whichever comes first; ¹	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
10. Non-emergency, non-black start 4SRB stationary RICE >500 HP	a. Limit concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd at 15 percent O ₂ ; or	
	b. Reduce formaldehyde emissions by 76 percent or more.	
11. Non-emergency, non-black start landfill or digester gas-fired stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; ¹	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

¹Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

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.

[75 FR 51595, Aug. 20, 2010]

Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests

As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

For each . . .	Complying with the requirement to . . .	You must . . .
1. New or reconstructed 2SLB stationary RICE with a brake horsepower >500 located at major sources; new or reconstructed 4SLB stationary RICE with a brake horsepower ≥250 located at major sources; and new or reconstructed CI stationary RICE with a brake horsepower >500 located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually. ¹
2. 4SRB stationary RICE with a brake horsepower ≥5,000 located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually. ¹
3. Stationary RICE with a brake horsepower >500 located at major sources and new or reconstructed 4SLB stationary RICE with a brake horsepower 250≤HP≤500 located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually. ¹
4. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are not limited use stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower >500 that are operated more than 24 hours per calendar year that are not limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs. or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are limited use stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower >500 that are operated more than 24 hours per calendar year and are limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs. or 5 years, whichever comes first.

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.

[75 FR 51596, Aug. 20, 2010]

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

As stated in §§63.6610, 63.6611, 63.6612, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE:

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB, 4SLB, and CI stationary RICE	a. Reduce CO emissions	i. Measure the O ₂ at the inlet and outlet of the control device; and	(1) Portable CO and O ₂ analyzer	(a) Using ASTM D6522–00 (2005) ^a (incorporated by reference, see §63.14). Measurements to determine O ₂ must be made at the same time as the measurements for CO concentration.
		ii. Measure the CO at the inlet and the outlet of the control device	(1) Portable CO and O ₂ analyzer	(a) Using ASTM D6522–00 (2005) ^{ab} (incorporated by reference, see §63.14) or

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
				Method 10 of 40 CFR appendix A. The CO concentration must be at 15 percent O ₂ , dry basis.
2. 4SRB stationary RICE	a. Reduce formaldehyde emissions	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O ₂ at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00m (2005)	(a) Measurements to determine O ₂ concentration must be made at the same time as the measurements for formaldehyde concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348–03, provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O ₂ concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005)	(a) Measurements to determine O ₂ concentration must be made at the same time and location as the measurements for formaldehyde concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348–03, provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
		v. Measure CO at the exhaust of the stationary RICE	(1) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522-00 (2005), ^a Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03	(a) CO Concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour longer runs.

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

^bYou may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03.

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

[75 FR 51597, Aug. 20, 2010]

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

As stated in §§63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Reduce CO emissions and not using oxidation catalyst	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
<p>3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year</p>	<p>a. Reduce CO emissions, and using a CEMS</p>	<p>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.</p>
<p>4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year</p>	<p>a. Reduce formaldehyde emissions and using NSCR</p>	<p>i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</p>
<p>5. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year</p>	<p>a. Reduce formaldehyde emissions and not using NSCR</p>	<p>i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.</p>
<p>6. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP</p>	<p>a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR</p>	<p>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 ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</p>

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
7. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O ₂ , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.
8. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Reduce CO or formaldehyde emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
9. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O ₂ , dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.

[75 FR 51598, Aug. 20, 2010]

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

As stated in §63.6640, you must continuously comply with the emissions and operating limitations and work or

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved; ² 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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		performance test.
2. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved; ⁹ and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, new or reconstructed non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP, existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Reduce CO emissions and using a CEMS	i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction of CO emissions according to §63.6620; and ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period; and iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. Collecting the catalyst inlet temperature data according to §63.6625(b); and ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. Non-emergency 4SRB stationary RICE with a brake HP ≥5,000 located at a major source of	a. Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
HAP		that the required formaldehyde percent reduction is achieved. ^a
7. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit; ^a and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit; ^a and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
10. Existing stationary CI RICE >500 HP that	a. Reduce CO or	i. Conducting performance tests every

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
are not limited use stationary RICE, and existing 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE	formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using oxidation catalyst or NSCR	8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE, and existing 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE	a. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and not using oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
12. Existing limited use CI stationary RICE >500 HP and existing limited use 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year	a. Reduce CO or formaldehyde emissions or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using an oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		§63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
13. Existing limited use CI stationary RICE >500 HP and existing limited use 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year	a. Reduce CO or formaldehyde emissions or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using an oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

^aAfter you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[75 FR 51600, Aug. 20, 2010]

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in §63.6650, you must comply with the following requirements for reports:

For each ...	You must submit a ...	The report must contain ...	You must submit the report ...
1. Existing non-emergency, non-black start stationary RICE 100≤HP≤500 located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >500 HP located at a major source of HAP;	Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the	i. Semiannually according to the requirements in §63.6650(b)(1)–(5) for engines that are not limited use stationary RICE subject to

For each ...	You must submit a ...	The report must contain ...	You must submit the report ...
existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >300 HP located at an area source of HAP; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP and operated more than 24 hours per calendar year; new or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP; and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP		reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4)	numerical emission limitations; and ii. Annually according to the requirements in §63.6650(b)(6)–(9) for engines that are limited use stationary RICE subject to numerical emission limitations. i. Semiannually according to the requirements in §63.6650(b). i. Semiannually according to the requirements in §63.6650(b).
2. New or reconstructed non-emergency stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	i. Annually, according to the requirements in §63.6650.
		b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and	i. See item 2.a.i.
		c. Any problems or errors suspected with the meters.	i. See item 2.a.i.

[75 FR 51603, Aug. 20, 2010]

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

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

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in §63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.6(b)(1)–(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)–(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)–(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)–(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)–(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes	Except that §63.7(b)(1) only applies as specified in §63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that §63.7(b)(2) only applies as specified in §63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that §63.7(c) only applies as specified in §63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at §63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)–(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	Yes.	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	Yes.	
§63.8(c)(2)–(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)–(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii), which applies to COMS.
		Except that §63.8(e) only applies as specified in §63.6645.	
§63.8(f)(1)–(5)	Alternative monitoring method	Yes	Except that §63.8(f)(4) only applies as specified in §63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that §63.8(f)(6) only applies as specified in §63.6645.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)–(5)	Initial notifications	Yes	Except that §63.9(b)(3) is reserved.
		Except that §63.9(b) only applies as specified in §63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that §63.9(c) only applies as specified in §63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that §63.9(d) only applies as specified in §63.6645.
§63.9(e)	Notification of performance test	Yes	Except that §63.9(e) only applies as specified in §63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that §63.9(g) only applies as specified in §63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that §63.9(g) only applies as specified in §63.6645.	
§63.9(h)(1)–(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.
			Except that §63.9(h) only applies as specified in §63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes.	
§63.10(b)(2)(i)–(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)–(xi)	Records	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that §63.10(c)(2)–(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that §63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

[75 FR 9688, Mar. 3, 2010]

**Indiana Department of Environmental Management
Office of Air Quality**

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

Source Background and Description

Source Name:	Keihin IPT Manufacturing, LLC
Source Location:	400 West New Road, Greenfield, IN 46140
County:	Hancock
SIC Code:	3714
Permit Renewal No.:	T059-29178-00013
Permit Reviewer:	Kristen Willoughby

On July 13, 2011, the Office of Air Quality (OAQ) had a notice published in Daily Reporter, Greenfield, Indiana, stating that Keihin IPT Manufacturing, LLC had applied for a Part 70 Operating Permit Renewal to a stationary stationary electronic fuel injection system for an automotive components manufacturing plant. The notice also stated that the OAQ proposed to issue the Part 70 Operating Permit Renewal for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

On August 15, 2011, Kathy Moore on behalf of Keihin IPT Manufacturing, LLC submitted comments to IDEM, OAQ on the draft Part 70 Operating Permit Renewal.

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

Comment 1:

The two (2) Small HPDC-6AT die-casting machines, NDC casting machine, and two (2) fire pumps have emissions below exemption thresholds and are insignificant activities. Therefore, they should not be listed as constructed and operated without a permit. Additionally, the two (2) fire pumps were listed on the original FESOP issued to the source on 5/29/98 (059-9160-00013) as insignificant activities (see A.3.(21)). Please remove the fire pumps from this section and change the header as shown below:

**~~Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit~~
Insignificant Activities Not Previously Included on Permit**

Response to Comment 1:

Pursuant to 40 CFR Part 70 and 326 IAC 2-7-5 (Permit Content), all applicable rule requirements must be included in a Title V permit. Neither the two (2) fire pumps nor the NDC casting machine were present in the previous Title V permit No. T059-16006-00013 issued on January 19, 2006 (nor in any modification since). Since these units have applicable rule requirements, they are required to be included in the descriptive information of the permit. Specifically regulated insignificant activities are required to be included. While an activity may be considered to be exempt under IDEM's construction rules, that does not preclude a company from including said emission units in the permit through an administrative

amendment. Therefore, these units are considered as operating without a permit.

Comment 2:

The Small HPDC-T/T Shot Blast Machine should also be called the Small HPDC-T/B Shot Blast Machine.

Response to Comment 2:

The Small HPDC-T/T Shot Blast Machine has been renamed the Small HPDC-T/B Shot Blast Machine in all documents as shown below:

Small HPDC-T/~~T~~**B** Shot Blast Machine

Comment 3:

The maximum throughput for the two (2) die maintenance area shot blast units is calculated incorrectly. These are manually operated units that are used for maintenance purposes only and are not part of production. When a die needs maintenance, it is put into a shot blaster to be cleaned prior to completing the maintenance work. The following is the correct methodology for calculating the maximum throughput for the two (2) units:

Max Throughput Rate for Die Maintenance Shot Blast units = 3 die per shift * 80 lbs per die * 1 shift/8hrs = 30 lbs die/hour + 2.74 lbs shot/hour = 32.74 lbs/hr

Response to Comment 3:

The maximum throughput for the die maintenance shot blasters has been recalculated based on the new methodology. The throughput for the remaining shot blasters has been adjusted to assume the facilities poured metal throughput is equally divided between the remaining units. The required control efficiency for the two (2) HPDC shot blasters was increased from 85% to 87% and the requirement to run controls on the die maintenance shot blasters was removed since it is not necessary to keep the source minor under PSD. Changes to the calculations can be found in Appendix A of this ATSD. The following changes to the TSD and permit are the result of these changes in the calculations.

1. *The PSD minor limits in the TSD have been modified to remove the two (2) die maintenance shot blasters and adjust the two (2) HPDC shot blaster limits.*

State Rule Applicability - Entire Source

326 IAC 2-2 (PSD)

This source's potential to emit of PM is greater than 250 tons per year. Therefore, the source has elected to take the following limits in order to remain a minor source under PSD:

Unit ID	Control	PM Limit (lb/hr)
Die Maintenance Shot Blast 1 & 2	baghouse	4.04
HPDC Small VCM Shot Blast	wet collector	6.06 8.76
Small HPDC-T/ T B Shot Blast Machine	wet collector	6.06 8.76

Compliance with the above limits, combined with the potential to emit PM from other emission

units at the source, shall limit the PM from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 not applicable.

2. *The 326 IAC 6-3-2 process weights and limits in the TSD have been modified to remove the two (2) die maintenance shot blasters since they are now exempt from the rule and to adjust the two (2) HPDC shot blaster limits.*

State Rule Applicability - Shellcore and Die Casting Facilities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the:

Summary of Process Weight Rate Limits		
Process / Emission Unit	P (ton/hr)	E (lb/hr)
GDC-Shellcore #1	0.62	2.97
GDC-Shellcore #2	0.62	2.97
GDC-Shellcore #3	0.62	2.97
GDC-Shellcore #4	0.62	2.97
GDC-Shellcore #5	0.62	2.97
NDC-Shellcore #10	0.62	2.97
Mag HPDC #1	0.75	3.38
Mag HPDC #2	0.75	3.38
Mag HPDC #3	0.75	3.38
GDC-SO #1	0.49	2.54
GDC-SO #2	0.49	2.54
GDC-SO #3	0.49	2.54
GDC-SO #4	0.49	2.54
GDC-SO #5	0.49	2.54
Die Maintenance Area Shot Blaster 1	2.38	7.33
Die Maintenance Area Shot Blaster 2	2.38	7.33
HPDC Small VCM Shot Blast	2.38 3.96	7.33 10.31
Small HPDC-T/B Shot Blast Machine	2.38 3.96	7.33 10.31
HPDC #5	0.75	3.38
NDC II machine	0.75	3.38

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

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

The baghouses and wet collectors shall be in operation at all times the shakeout machines, ~~die maintenance shot blasters~~, HPDC Small VCM Shot Blaster, and Small HPDC-T/T Shot Blaster are in operation, in order to comply with the above limits.

- (b) The 6 shell core machines, 10 gravity casting machines, 3 SV small HPDC-VCM die casting machines, **die maintenance shot blasters**, 2 Small HPDC-6AT die-casting machines, and 4 aluminum die casting machines each have potential emissions less than five hundred fifty-one thousandths (0.551) pound per hour. Therefore, the requirements of 326 IAC 6-3-2 do not apply.
3. *Condition A.2 was modified to remove the two (2) die maintenance shot blasters since they are now considered insignificant activities. Condition A.3 was modified to list the two (2) die maintenance shot blasters. The facility description box under Section D.2 was also updated.*

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

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

...

- ~~(d) Two (2) shot blasting units, installed in 2003, each with a maximum throughput rate of 1,000 pounds of glass beads per month, each with emissions controlled by a baghouse. These units are located in the Die Maintenance area. [326 IAC 6-3]~~
- (ed) One (1) shot blasting unit, installed in 2006, with a maximum throughput rate of 2.05 pounds of zinc shot per shift, with emissions controlled by a wet collector. This unit is referred to as the HPDC Small VCM Shot Blast. [326 IAC 6-3]
- (fe) One (1) zinc shot blast machine, constructed in 2003, with a maximum blast rate of 2.0 pounds of abrasive per hour, with emissions controlled by a wet collector. This unit is referred to as the Small HPDC-T/~~TB~~ Shot Blast. [326 IAC 6-3]
- (gf) Machining and washing processes, consisting of sixteen (16) injector component machines using Viscor and three (3) Napthal washers, identified as Unit 4, constructed in 1989, with a maximum throughput rate of 1.35 gallons of mineral spirits per hour, controlled by one thermal oxidizer.
- (hg) Two (2) natural gas-fired boilers, identified as B-1 and B-2, installed in 1989 and 1999, respectively, each with a maximum heat input capacity of 10.46 MMBtu per hour, with emissions uncontrolled and exhausting at stacks B-1 and B-2.

Under NSPS 40 CFR 60, Subpart Dc, Unit B-2 is considered an existing affected unit.

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

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

- (a) An emission unit or activity whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(e)(1) or the exemption levels specified in the following, whichever is lower:
- (1) For lead or lead compounds measured as elemental lead, the exemption level is six-tenths (0.6) ton per year or three and twenty-nine hundredths (3.29) pounds per day.

- (2) For carbon monoxide (CO), the exemption limit is twenty-five (25) pounds per day.
- (3) For sulfur dioxide, the exemption level is five (5) pounds per hour or twenty-five (25) pounds per day.
- (4) For VOC, the exemption limit is three (3) pounds per hour or fifteen (15) pounds per day.
- (5) For nitrogen oxides (NOx), the exemption limit is five (5) pounds per hour or twenty-five (25) pounds per day.
- (6) For an emission unit or activity with potential uncontrolled emissions of particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM10), the exemption level is either five (5) pounds per hour or twenty-five (25) pounds per day.

...

- (l) **Two (2) shot blasting units, installed in 2003, each with a maximum throughput rate of 1,000 pounds of glass beads per month, each with emissions controlled by a baghouse. These units are located in the Die Maintenance area.**

...

SECTION D.2

FACILITY OPERATION CONDITIONS - Casting

Facility Description [326 IAC 2-7-5(15)]:

...

- ~~(e) Two (2) shot blasting units, installed in 2003, each with a maximum throughput rate of 1,000 pounds of glass beads per month, each with emissions controlled by a baghouse. These units are located in the Die Maintenance area. [326 IAC 6-3]~~
- (fe) One (1) shot blasting unit, installed in 2006, with a maximum throughput rate of 2.05 pounds of zinc shot per shift, with emissions controlled by a wet collector. This unit is referred to as the HPDC Small VCM Shot Blast. [326 IAC 6-3]
- (gf) One (1) zinc shot blast machine, constructed in 2003, with a maximum blast rate of 2.0 pounds of abrasive per hour, with emissions controlled by a wet collector. This unit is referred to as the Small HPDC-T/B Shot Blast. [326 IAC 6-3]

Insignificant Activities

- (a) An emission unit or activity whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(e)(1) or the exemption levels specified in the following, whichever is lower:
 - (1) For lead or lead compounds measured as elemental lead, the exemption level is six-tenths (0.6) ton per year or three and twenty-nine hundredths (3.29) pounds per day.
 - (2) For carbon monoxide (CO), the exemption limit is twenty-five (25) pounds per day.
 - (3) For sulfur dioxide, the exemption level is five (5) pounds per hour or twenty-five (25) pounds per day.
 - (4) For VOC, the exemption limit is three (3) pounds per hour or fifteen (15) pounds per day.
 - (5) For nitrogen oxides (NOx), the exemption limit is five (5) pounds per hour or twenty-five (25) pounds per day.

(6) For an emission unit or activity with potential uncontrolled emissions of particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM10), the exemption level is either five (5) pounds per hour or twenty-five (25) pounds per day.

...

(I) Two (2) shot blasting units, installed in 2003, each with a maximum throughput rate of 1,000 pounds of glass beads per month, each with emissions controlled by a baghouse. These units are located in the Die Maintenance area.

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

4. *The PSD minor limits in the permit have been modified to remove the two (2) die maintenance shot blasters and adjust the two (2) HPDC shot blaster limits.*

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

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

Unit ID	Control	PM Limit (lb/hr)
Die Maintenance Shot Blast 1 & 2	baghouse	4.04
HPDC Small VCM Shot Blast	wet collector	6.06 8.76
HPDC-T/TB Shot Blast Machine	wet collector	6.06 8.76

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

5. *The 326 IAC 6-3-2 process weights and limits in the permit have been modified to remove the two (2) die maintenance shot blasters since they are now exempt from the rule and adjust the two (2) HPDC shot blaster limits.*

D.2.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of following operations shall not exceed the pound per hour limit listed in the table below:

Summary of Process Weight Rate Limits		
Process / Emission Unit	P (ton/hr)	E (lb/hr)
GDC-Shellcore #1	0.62	2.97
GDC-Shellcore #2	0.62	2.97
GDC-Shellcore #3	0.62	2.97
GDC-Shellcore #4	0.62	2.97

Summary of Process Weight Rate Limits		
Process / Emission Unit	P (ton/hr)	E (lb/hr)
GDC-Shellcore #5	0.62	2.97
NDC-Shellcore #10	0.62	2.97
Mag HPDC #1	0.75	3.38
Mag HPDC #2	0.75	3.38
Mag HPDC #3	0.75	3.38
GDC-SO #1	0.49	2.54
GDC-SO #2	0.49	2.54
GDC-SO #3	0.49	2.54
GDC-SO #4	0.49	2.54
GDC-SO #5	0.49	2.54
Die Maintenance Area Shot Blaster 1	2.38	7.33
Die Maintenance Area Shot Blaster 2	2.38	7.33
HPDC Small VCM Shot Blast	2.38 3.96	7.33 10.31
Small HPDC-T/TB Shot Blast Machine	2.38 3.96	7.33 10.31
HPDC #5	0.75	3.38
NDC II machine	0.75	3.38

The pound per hour limit was calculated using the following equation:

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

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

6. *Compliance determination and compliance monitoring conditions have been updated to reflect the changes to the PSD minor limits and 326 IAC 6-3-2 limits as follows:*

D.2.5 Particulate Matter (PM)

- (a) In order to comply with Condition D.2.2, the baghouses for particulate control shall be in operation and control emissions from GDC-Shellcore #1 - #5, NDC-Shellcore #10, HPDC #5 and HPDC #6 at all times that these processes are in operation.
- (b) In order to comply with Condition D.2.2, the dust collectors for PM control shall be in operation and control emissions from GDC-SO #1 - #5 at all times that these processes are in operation.
- (c) In order to comply with Conditions D.2.1 and D.2.2, the wet collectors and baghouse for PM control shall be in operation and control emissions from ~~Die Maintenance Area Shot Blasters~~, HPDC Small VCM Shot Blast, and Small HPDC T/TB Shot Blast Machine at all times that these processes are in operation.

- (d) 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.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) In order to demonstrate compliance with Condition D.2.1 **and D.2.2**, the Permittee shall perform PM testing of the ~~Die Maintenance Area Shot Blasters~~, HPDC Small VCM Shot Blast, and Small HPDC-~~T/T~~ **T/B** Shot Blast Machine wet collectors, no later than 180 days after issuance of Title V Operating Permit Renewal T059-29178-00013. This testing shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

- (b) ...

D.2.7 Parametric Monitoring (Baghouses)

The Permittee shall record the pressure drop across the baghouses/ dust collectors used in conjunction with GDC-Shellcore #1 - #5, NDC-Shellcore #10, GDC-SO #1 - #5, ~~Die Maintenance Area Shot Blasters~~, HPDC #4, and HPDC #5 at least once per day when these facilities are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 7.0 inches of water or a range established during the latest stack test, the Permittee shall take 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. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

Comment 4:

Please remove the requirement to conduct stack testing for the Die Maintenance Area Shot Blasters. These units are manually operated units that are used for maintenance purposes only and are not part of production. When a die needs maintenance, it is put into the shot blast unit to be cleaned prior to completing the maintenance work.

Response to Comment 4:

The testing has been removed for the Die Maintenance Area Shot Blasters due to the change in the throughput and the removal of their PSD minor limit. Since the units no longer have a PSD minor or a 326 IAC 6-3-2 limit they need to demonstrate compliance with, they no longer need to be tested.

Comment 5:

Please revise Condition D.2.4 to require testing on only one of the HPDC shot blast machines. Each of the blasters and the control devices are Wheelabrator blasters, are the same model and have the same throughput.

Response to Comment 5:

Since the shot blasters are identical, use the same type of shot, and blast the same type of metal, IDEM will modify the testing to only require testing one of the HPDC shot blast machines every five (5) years.

D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) In order to demonstrate compliance with Condition D.2.1 **and D.2.2**, the Permittee shall perform PM testing of the ~~Die Maintenance Area Shot Blasters~~, HPDC Small VCM Shot Blast **wet collector**, **and or the Small HPDC-T/T T/B Shot Blast Machine wet collectors**, no later than 180 days after issuance of Title V Operating Permit Renewal T059-29178-00013. This testing shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. **The source will test the shot blaster wet collector for which the longest period of time has passed since the last valid compliance test.** Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
- (b) ...

Comment 6:

Keihin IPT Manufacturing, LLC request the stack test requirements for one of the GDC Die Cast units be removed. IDEM is requiring the test to confirm an emission factor; however, even if the emission factor were an order of magnitude higher, the uncontrolled emissions from each of the machines is extremely low.

If testing is required, we request testing for PM only, with the assumption that PM=PM10=PM2.5. Keihin IPT Manufacturing, LLC would not expect to have condensable emissions as the stack temperatures are close to ambient temperatures.

Response to Comment 6:

IDEM believes stack testing is appropriate for these units to demonstrate compliance with the site specific emission factor. The emission factor IDEM would typically use for these units is from AP-42 Grey Iron Foundries and is a magnitude 23 times greater than the emission factor proposed by Keihin IPT Manufacturing, LLC.

The GDC Die Cast units are used to pour hot aluminum into metal molds. IDEM would expect condensable PM10 and condensable PM2.5 emissions to form during this type of operation. Therefore, it can not be assumed that PM=PM10=PM2.5 for this type of operation.

No change has been made as a result of this comment.

Comment 7:

The typographical error in Condition E.2.2 should be corrected as shown below:

E.2.2 Stationary Reciprocating Internal Combustion Engines NESHAP [326 IAC 20-82][40 CFR Part 63, Subpart ZZZZ]

The Permittee which ~~engages in organic liquid distribution~~ have **stationary reciprocating internal combustion engines** with the following provisions of 40 CFR 63, Subpart ZZZZ (included as Attachment B of this permit), as specified as follows:

Response to Comment 7:

Condition E.2.2 has been corrected as shown below:

E.2.2 Stationary Reciprocating Internal Combustion Engines NESHAP [326 IAC 20-82][40 CFR Part 63, Subpart ZZZZ]

The Permittee which ~~engages in organic liquid distribution~~ have **stationary reciprocating internal combustion engines** with the following provisions of 40 CFR 63, Subpart ZZZZ (included as Attachment B of this permit), as specified as follows:

Additional Changes

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

- (a) Upon further review, the potential to emit for GDC-Shellcore #1 - #5, NDC-Shellcore #10, Mag HPDC #1 - #3, HPDC #5, and the NDC II machine is less than 0.551 pound per hour each. The 326 IAC 6-3-2 limits and corresponding monitoring for these units have been removed.

State Rule Applicability - Shellcore and Die Casting Facilities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the:

Summary of Process Weight Rate Limits		
Process / Emission Unit	P (ton/hr)	E (lb/hr)
GDC-Shellcore #1	0.62	2.97
GDC-Shellcore #2	0.62	2.97
GDC-Shellcore #3	0.62	2.97
GDC-Shellcore #4	0.62	2.97
GDC-Shellcore #5	0.62	2.97
NDC-Shellcore #10	0.62	2.97
Mag HPDC #1	0.75	3.38
Mag HPDC #2	0.75	3.38
Mag HPDC #3	0.75	3.38
GDC-SO #1	0.49	2.54
GDC-SO #2	0.49	2.54
GDC-SO #3	0.49	2.54
GDC-SO #4	0.49	2.54
GDC-SO #5	0.49	2.54
Die Maintenance Area Shot Blaster 1	2.38	7.33

Summary of Process Weight Rate Limits		
Process / Emission Unit	P (ton/hr)	E (lb/hr)
Die Maintenance Area Shot Blaster 2	2.38	7.33
HPDC Small VCM Shot Blast	2.38 3.96	7.33 10.31
Small HPDC-T/TB Shot Blast Machine	2.38 3.96	7.33 10.31
HPDC #5	0.75	3.38
NDC II machine	0.75	3.38

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

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

The baghouses and wet collectors shall be in operation at all times the shakeout machines, ~~die maintenance shot blasters~~, HPDC Small VCM Shot Blaster, and Small HPDC-T/T Shot Blaster are in operation, in order to comply with the above limits.

- (b) The 6 shell core machines, 10 gravity casting machines, 3 SV small HPDC-VCM die casting machines, **die maintenance shot blasters**, 2 Small HPDC-6AT die-casting machines, **GDC-Shellcore #1 - #5, NDC-Shellcore #10, Mag HPDC #1 - #3, HPDC #5, NDC II machine**, and 4 aluminum die casting machines each have potential emissions less than five hundred fifty-one thousandths (0.551) pound per hour. Therefore, the requirements of 326 IAC 6-3-2 do not apply.

D.2.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of following operations shall not exceed the pound per hour limit listed in the table below:

Summary of Process Weight Rate Limits		
Process / Emission Unit	P (ton/hr)	E (lb/hr)
GDC-Shellcore #1	0.62	2.97
GDC-Shellcore #2	0.62	2.97
GDC-Shellcore #3	0.62	2.97
GDC-Shellcore #4	0.62	2.97
GDC-Shellcore #5	0.62	2.97
NDC-Shellcore #10	0.62	2.97
Mag HPDC #1	0.75	3.38
Mag HPDC #2	0.75	3.38
Mag HPDC #3	0.75	3.38
GDC-SO #1	0.49	2.54
GDC-SO #2	0.49	2.54

Summary of Process Weight Rate Limits		
Process / Emission Unit	P (ton/hr)	E (lb/hr)
GDC-SO #3	0.49	2.54
GDC-SO #4	0.49	2.54
GDC-SO #5	0.49	2.54
Die Maintenance Area Shot Blaster 1	2.38	7.33
Die Maintenance Area Shot Blaster 2	2.38	7.33
HPDC Small VCM Shot Blast	2.38 3.96	7.33 10.31
Small HPDC-T/ TB Shot Blast Machine	2.38 3.96	7.33 10.31
HPDC #5	0.75	3.38
NDC II machine	0.75	3.38

The pound per hour limit was calculated using the following equation:

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

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

D.2.5 Particulate Matter (PM)

-
- (a) ~~In order to comply with Condition D.2.2, the baghouses for particulate control shall be in operation and control emissions from GDC-Shellcore #1 - #5, NDC-Shellcore #10, HPDC #5 and HPDC #6 at all times that these processes are in operation.~~
 - (ba) In order to comply with Condition D.2.2, the dust collectors for PM control shall be in operation and control emissions from GDC-SO #1 - #5 at all times that these processes are in operation.
 - (eb) In order to comply with Conditions D.2.1 and D.2.2, the wet collectors ~~and baghouse~~ for PM control shall be in operation and control emissions from ~~Die Maintenance Area Shot Blasters,~~ HPDC Small VCM Shot Blast, and Small HPDC T/~~TB~~ Shot Blast Machine at all times that these processes are in operation.
 - (dc) 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.2.7 Parametric Monitoring (Baghouses)

The Permittee shall record the pressure drop across the baghouses/ dust collectors used in conjunction with ~~GDC-Shellcore #1 - #5, NDC-Shellcore #10, Die Maintenance Area Shot Blasters, HPDC #4, and HPDC #5~~ at least once per day when these facilities are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 7.0 inches of water or a range established during the latest stack test, the Permittee shall take 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. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

IDEM Contact

- (a) Questions regarding this proposed Part 70 Operating Permit Renewal can be directed to Kristen Willoughby at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-3031 or toll free at 1-800-451-6027 extension 3-3031.
- (b) A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM’s Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emission Calculations Summary

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-20178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

POTENTIAL TO EMIT BEFORE CONTROLS

Emission Units	PM	PM10	PM2.5	SO ₂	NOx	VOC	CO	CO _{2e}
2 Natural Gas-Fired Boilers	0.17	0.68	0.68	0.05	8.98	0.49	7.55	10,846.59
9 Aluminum Melt Furnaces	107.82	65.20	54.16	0.04	6.91	5.40	5.80	8341.02
Magnesium Furnaces	11.90	11.90	11.90	-	-	-	-	-
6 Shell Core Machines	3.30	3.30	3.30	0.96	1.50	0.06	-	-
20 Aluminum Casting Machines	3.48	3.48	3.48	0.48	0.24	3.38	-	-
5 Knockout Machines	34.16	23.91	14.31	-	-	12.81	-	-
Injector Lube - Aluminum Casting	-	-	-	-	-	0.06	-	-
3 Magnesium Casting Machines	0.15	0.15	0.15	-	-	-	-	-
Injector Lube - Magnesium Casting	-	-	-	-	-	0.06	-	-
Shot Blasting	591.34	59.13	59.13	-	-	-	-	-
Machining and Washing Process (Unit 4)	-	-	-	-	-	37.96	-	-
Degreasing	-	-	-	-	-	0.63	-	-
Fire Pumps	0.16	0.16	0.16	0.15	2.23	0.18	0.48	-
Welding	0.37	0.37	0.37	-	-	-	-	-
Machining Operations**	Neg	Neg	Neg	-	-	-	-	-
Mineral Spirits Storage Tanks*	-	-	-	-	-	0.10	-	-
Mister Collector***	2.00	2.00	2.00	-	-	-	5.13	-
Miscellaneous Brake Cleaners	-	-	-	-	-	-	-	-
TOTAL	754.85	170.28	149.64	1.68	19.86	66.26	13.83	19,187.62

POTENTIAL TO EMIT AFTER CONTROLS

Emission Units	PM	PM10	PM2.5	SO ₂	NOx	VOC	CO
2 Natural Gas-Fired Boilers	0.17	0.68	0.68	0.05	8.98	0.49	7.55
9 Aluminum Melt Furnaces	24.77	14.98	12.44	0.04	6.91	5.40	5.80
Magnesium Furnaces	11.90	11.90	11.90	-	-	-	-
6 Shell Core Machines	0.33	0.33	0.33	0.96	1.50	0.06	-
20 Aluminum Casting Machines	0.49	0.49	0.49	0.48	0.24	3.38	-
5 Knockout Machines	3.42	2.39	1.43	-	-	12.81	-
Injector Lube - Aluminum Casting	-	-	-	-	-	0.06	-
3 Magnesium Casting Machines	0.15	0.15	0.15	-	-	-	-
Injector Lube - Magnesium Casting	-	-	-	-	-	0.06	-
Shot Blasting	76.78	7.68	7.68	-	-	-	-
Machining and Washing Process (Unit 4)	-	-	-	-	-	5.69	-
Degreasing	-	-	-	-	-	0.63	-
Fire Pumps	0.16	0.16	0.16	0.15	2.23	0.18	0.48
Welding	0.37	0.37	0.37	-	-	-	-
Machining Operations**	Neg	Neg	Neg	-	-	-	-
Mineral Spirits Storage Tanks*	-	-	-	-	-	0.10	-
Mister Collector***	2.00	2.00	2.00	-	-	-	5.13
Miscellaneous Brake Cleaners	-	-	-	-	-	-	-
TOTAL	120.52	41.12	37.62	1.68	19.86	33.99	13.83

LIMITED EMISSIONS

Emission Units	PM	PM10	PM2.5	SO ₂	NOx	VOC	CO
2 Natural Gas-Fired Boilers	0.17	0.68	0.68	0.05	8.98	0.49	7.55
9 Aluminum Melt Furnaces	107.82	65.20	54.16	0.04	6.91	5.40	5.80
Magnesium Furnaces	11.90	11.90	11.90	-	-	-	-
6 Shell Core Machines	3.30	3.30	3.30	0.96	1.50	0.06	-
20 Aluminum Casting Machines	3.48	3.48	3.48	0.48	0.24	3.38	-
5 Knockout Machines	34.16	23.91	14.31	-	-	12.81	-
Injector Lube - Aluminum Casting	-	-	-	-	-	0.06	-
3 Magnesium Casting Machines	0.15	0.15	0.15	-	-	-	-
Injector Lube - Magnesium Casting	-	-	-	-	-	0.06	-
Shot Blasting	77.93	59.13	59.13	-	-	-	-
Machining and Washing Process (Unit 4)	-	-	-	-	-	5.69	-
Degreasing	-	-	-	-	-	0.63	-
Fire Pumps	0.16	0.16	0.16	0.15	2.23	0.18	0.48
Welding	0.37	0.37	0.37	-	-	-	-
Machining Operations**	Neg	Neg	Neg	-	-	-	-
Mineral Spirits Storage Tanks*	-	-	-	-	-	0.10	-
Mister Collector***	2.00	2.00	2.00	-	-	-	5.13
Miscellaneous Brake Cleaners	-	-	-	-	-	-	-
TOTAL	241.45	170.28	149.64	1.68	19.86	33.99	13.83

*Mineral Spirits Storage Tanks calculations were done using TANKS 4.0.9d. Toluene was substituted for mineral spirits since mineral spirits is not an option in the program.

**The machining operations are CNC machining units and have negligible emissions. Parts are inserted into the machine, the door is closed and the part is machined. During operation, the machining interface is continuously flooded with an aqueous cutting coolant. After further review, these operations should be listed under the insignificant activity as defined under 326 IAC 2-7-(121)(K)(v).

***Mister Collector emissions were conservatively estimated at 2tpy.

Note 2: HAPs estimates were provided by the source. Worst case cleaning solvents and brake cleaners were inventoried and the maximum HAP content taken to derive the HAP estimates as shown below, except for HCl which results from fluxing in the aluminum furnaces.

HAPs	PTE (tons/year)
Hydrogen Chloride (HCl)	7.5
Hydrogen Fluoride (HF)	0.13
Perchloroethylene	5.00
HAPs from Natural Gas Combustion in Boilers	0.17
HAPs from Natural Gas Combustion in Furnaces	0.13
Welding	0.03
HAPs from Fire Pumps	1.95E-03
TOTAL	12.9

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR<100
Two (2) Cleaver Brooks Boilers (B-1 and B-2)**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

Heat Input Capacity
(MMBtu/hour)

Potential Throughput
(MMCF/year)

20.92 (2 Units Total)

180

	Pollutant						
	PM	* PM10	*PM2.5	SO ₂	** NO _x	VOC	CO
Emission Factor (lb/MMCF)	1.90	7.60	7.60	0.60	100	5.50	84.0
Potential To Emit (tons/year)	0.17	0.68	0.68	0.05	8.98	0.49	7.55

* PM10 and PM_{2.5} emission factors are filterable and condensable PM and PM10 combined.

**Emission factor for NO_x: Uncontrolled = 100 lb/MMCF.

Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (July, 1998).

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

METHODOLOGY

Potential throughput (MMCF/year) = Heat input capacity (MMBtu/hour) * 8760 hours/year * 1 MMCF/1020 MMBtu

PTE (tons/year) = Potential throughput (MMCF/year) * Emission factor (lb/MMCF) * 1 ton/2000 lbs

See next page for HAPs emissions calculations.

Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR<100
Two (2) Cleaver Brooks Boilers (B-1 and B-2)

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

HAPs - Organics

Emission Factor (lb/MMCF)	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential To Emit (tons/year)	1.89E-04	1.08E-04	6.74E-03	1.62E-01	3.05E-04

HAPs - Metals

Emission Factor (lb/MMCF)	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential To Emit (tons/year)	4.49E-05	9.88E-05	1.26E-04	3.41E-05	1.89E-04

Methodology is the same as previous page.

SUM

1.70E-01

The five highest organic and metal HAPs emission factors provided above are from AP-42, Chapter 1.4, Table 1-4.2, 1.4-3 and 1.4-4 (July, 1998).
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Two (2) Cleaver Brooks Boilers (B-1 and B-2)

Greenhouse Gas Emissions

Company Name: Keihin, IPT Mfg., Inc.

Address: 400 West New Road, Greenfield, Indiana 46140

Permit No.: T059-29178-00013

Reviewer: Kristen Willoughby

Date: January 26, 2011

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2	CH4	N2O
	120000	2.3	2.2
Potential Emission in tons/yr	10780.98	0.21	0.20
Summed Potential Emissions in tons/yr	10781.39		
CO2e Total in tons/yr	10,846.59		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emission Calculations
Emissions due to Natural Gas Combustion Only
From Ten (10) Aluminum Melt Furnaces**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

4.8 GDC-F #1-5
 0.275 GDC-F #1-5
 2.5 HPDC-T/B
 1.48 HPDC-T/B
 1.265 Large HPDC-2pc
 1.091 Large HPDC-2pc
 1.265 Large HPDC-6AT
 1.091 Large HPDC-6AT
 2.322 Small HPDC-VCM

 16.089 **Total**

Heat Input Capacity
(MMBtu/hour)

16.1

Potential Throughput
(MMCF/year)

138

Pollutant

	* PM	* PM10	*PM2.5	SO ₂	** NO _x	VOC	CO
Emission Factor (lb/MMCF)	1.90	7.60	7.60	0.60	100	5.5	84.0
Potential To Emit (tons/year)	NA	NA	NA	0.04	6.91	0.38	5.80

* PM and PM10 emissions are included in the emission calculation for melting process because the emission factors are the ones for the furnaces.

**Emission factor for NO_x: Uncontrolled = 100 lb/MMCF.

Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (July, 1998).

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

METHODOLOGY

Potential throughput (MMCF/year) = Heat input capacity (MMBtu/hour) * 8760 hours/year * 1 MMCF/1020 MMBtu

PTE (tons/year) = Potential throughput (MMCF/year) * Emission factor (lb/MMCF) * 1 ton/2000 lbs

See next page for HAPs emissions calculations.

**Appendix A: Emission Calculations
Emissions due to Natural Gas Combustion Only
From Ten (10) Aluminum Melt Furnaces**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

HAPs - Organics

Emission Factor (lb/MMCF)	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential To Emit (tons/year)	1.45E-04	8.29E-05	5.18E-03	1.24E-01	2.35E-04

HAPs - Metals

Emission Factor (lb/MMCF)	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential To Emit (tons/year)	3.45E-05	7.60E-05	9.67E-05	2.63E-05	1.45E-04

Methodology is the same as previous page.

SUM 1.30E-01

The five highest organic and metal HAPs emission factors provided above are from AP-42, Chapter 1.4, Table 1-4.2, 1.4-3 and 1.4-4 (July, 1998). Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Emissions due to Natural Gas Combustion Only
From Ten (10) Aluminum Melt Furnaces
Greenhouse Gas Emissions

Company Name: Keihin, IPT Mfg., Inc.

Address: 400 West New Road, Greenfield, Indiana 46140

Permit No.: T059-29178-00013

Reviewer: Kristen Willoughby

Date: January 26, 2011

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120000	2.3	2.2
Potential Emission in tons/yr	8290.57	0.16	0.15
Summed Potential Emissions in tons/yr	8290.88		
CO2e Total in tons/yr	8,341.02		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emission Calculations
Particulate Emissions
From Nine (9) Aluminum Melt Furnaces**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

Unit ID	Maximum Throughput Rate (lb/hour) (ton/hour)		E.F PM (lb/ton)	E.F PM10 (lb/ton)	E.F PM2.5 (lb/ton)	E.F VOC (lb/ton)	PTE of PM before control (tons/year)	PTE of PM10 before control (tons/year)	PTE of PM2.5 before control (tons/year)	PTE of VOC (tons/year)	**Control Efficiency (%)	Control Description	PTE of PM after control (tons/year)	PTE of PM10 after control (tons/year)	PTE of PM2.5 after control (tons/year)	PTE of PM before control (lb/hour)	** Particulate Emission Limit (lb/hour)
GDC-F #1	1100	0.55	4.3	2.6	2.16	0.2	10.4	6.3	5.2	0.48	90%	Baghouse	1.04	0.63	0.52	2.37	2.75
GDC-F #2	1100	0.55	4.3	2.6	2.16	0.2	10.4	6.3	5.2	0.48	90%	Baghouse	1.04	0.63	0.52	2.37	2.75
GDC-F #3	1100	0.55	4.3	2.6	2.16	0.2	10.4	6.3	5.2	0.48	90%	Baghouse	1.04	0.63	0.52	2.37	2.75
GDC-F #4	1100	0.55	4.3	2.6	2.16	0.2	10.4	6.3	5.2	0.48	90%	Baghouse	1.04	0.63	0.52	2.37	2.75
GDC-F #5	1100	0.55	4.3	2.6	2.16	0.2	10.4	6.3	5.2	0.48	90%	Baghouse	1.04	0.63	0.52	2.37	2.75
HPDC-T/B #1	1300	0.65	4.3	2.6	2.16	0.2	12.2	7.4	6.1	0.57	90%	Baghouse (EF-120)	1.22	0.74	0.61	2.80	3.07
Large HPDC-2pc	1500	0.75	4.3	2.6	2.16	0.2	14.1	8.5	7.1	0.66	90%	Baghouse (EF-120)	1.41	0.85	0.71	3.23	3.38
Large HPDC-6AT	1500	0.75	4.3	2.6	2.16	0.2	14.1	8.5	7.1	0.66	90%	Baghouse (EF-120)	1.41	0.85	0.71	3.23	3.38
Small HPDC-VCM Striko	1650	0.83	4.3	2.6	2.16	0.2	15.5	9.40	7.8	0.72	0%	NA	15.54	9.40	7.81	3.55	3.60
Fluxing: Chlorination	9.6	0.005	1000	532	532.00	0.0	21.0	11.2	11.2	0.00	90%	Baghouse	2.10	1.12	1.12	4.80	0.11
TOTAL							107.8	65.20	54.2	5.02			24.77	14.98	12.44		

Emission factor for PM & PM10 is from AP-42, Table 12.8-2, SCC 3-04-001-03 for Secondary Aluminum Operations, Reveratory Furnace (1995).

Emission factor for VOC is from and FIRE, Industrial Processes - Aluminum (SCC 3-04-001-03).

Emission factor for fluxing: chlorination is from FIRE, Industrial Processes - Aluminum (SCC 3-04-001-04).

** Particulate Emission Limit was calculated using the 326 IAC 6-3 Process Weight Rule.

METHODOLOGY

Maximum throughput (tons/hour) = Maximum throughput (lbs/hour) * 1ton/2000 lbs

PTE before control (tons/year) = Maximum throughput (tons/hour) * Emission factor (lb/ton) * 1ton/2000 lbs * 8760 hours/year

PTE after control (tons/year) = Maximum throughput (tons/hour) * Emission factor (lb/ton)

PTE after control (tons/year) = Maximum throughput (tons/hour) * Emission factor (lb/ton) * 1ton/2000 lbs * 8760 hours/year * (1- Control efficiency %)

**Appendix A: Emission Calculations
Aluminum Facilities (Unit 2)**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

POTENTIAL TO EMIT BEFORE CONTROLS IN TONS PER YEAR

Emission Units	Maximum Throughput		PM Emission Factor	PTE of PM	PM10 Emission Factor	PTE of PM10	PM2.5 Emission Factor	PTE of PM2.5	SO ₂ Emission Factor	PTE of SO ₂	NO _x Emission Factor	PTE of NO _x	VOC Emission Factor	PTE of VOC
	(lbs/hour)	(tons/hour)	(lbs/ton)	(tons/year)	(lb/ton)	(tons/year)	(lb/ton)	(tons/year)	(lb/ton)	(tons/year)	(lb/ton)	(tons/year)	(lb/ton)	(tons/year)
6 Shell Core Machines	1368	0.68	1.10	3.30	1.10	3.30	1.10	3.30	0.32	0.96	0.50	1.50	0.02	0.06
14 Casting Machines (Sand Cores)	8316	4.16	0.18	3.28	0.18	3.28	0.18	3.28	0.02	0.36	0.01	0.18	0.14	2.55
3 HPDC-VCN Casting Machines	1200	0.60	0.015	0.04	0.015	0.04	0.015	0.04	0.02	0.05	0.01	0.03	0.14	0.37
1 High Pressure Casting Machine	1500	0.75	0.015	0.05	0.015	0.05	0.015	0.05	0.02	0.07	0.01	0.03	0.14	0.46
2 High Pressure Casting Machines	2000	1.00	0.015	0.07	0.015	0.07	0.015	0.07	0.02	0.09	0.01	0.04	0.14	0.61
NDC Casting Machine	1500	0.75	0.015	0.05	0.015	0.05	0.015	0.05	0.02	0.07	0.01	0.03	0.14	0.46
5 Knockout Machines	4875	2.44	3.20	34.2	2.24	23.9	1.34	14.3	0.00	0.00	0.00	0.00	1.2	12.8
TOTAL				40.9		30.7		21.1		1.59		1.82		17.3

Emission factor for Shell Core Machines from FIRE, Industrial Processes - Grey Iron Foundries (SCC 3-04-003-70) and AP-42, Table 12.10-7 (SCC 3-04-003-19)

Source for VOC emission factor FIRE US EPA 450-90-003 and Form R Reporting of Binder Chemicals in Foundries, 1998. VOC = Formaldehyde VOC = 0.00001 lbs of Formaldehyde per lb of sand = 0.02 lbs per ton of sand

There is no PM/PM10/PM2.5 emission factor for die-casting. Therefore, emission factor of 0.18 lb/ton was taken from an air permit for a clean aluminum processing facility in Kentucky to derive a worst case scenario for units using sand cores. Testing will be required to verify this emission factor.

PM/PM10/PM2.5 emissions for die-casting units not using sand cores are from FIRE for zinc casting (3-04-008-73), which is the only available emission factor in FIRE for a pure metal of similar atomic weight.

Emission factor for SO₂, NO_x, and VOC for all casting machines from FIRE, Industrial Processes - Secondary Metal Production Aluminum (SCC 3-04-001-14)

Emission factor for Knockout Machines from FIRE, Industrial Processes - Grey Iron Foundries (SCC 3-04-003-31) and AP-42 Table 12.10-9

METHODOLOGY

Maximum throughput (tons/hour) = Maximum throughput (lbs/hour) * 1ton/2000 lbs

PTE before control (tons/year) = Maximum throughput (tons/hour) * Emission factor (lb/ton) * 1ton/2000 lbs * 8760 hours/year

POTENTIAL TO EMIT AFTER CONTROLS IN TONS PER YEAR

Emission Units	Control Efficiency %	PTE of PM	PTE of PM10	PTE of PM2.5	PTE of SO ₂	PTE of NO _x	PTE of VOC
		(tons per year)					
6 Shell Core Machines	90%	0.33	0.33	0.33	0.96	1.50	0.06
14 Casting Machines (Sand Cores)	90%	0.33	0.33	0.33	0.36	0.18	2.55
3 HPDC-VCN Casting Machines	0%	0.04	0.04	0.04	0.05	0.03	0.37
2 High Pressure Casting Machines	90%	0.00	0.00	0.00	0.07	0.03	0.46
2 High Pressure Casting Machines	0%	0.07	0.07	0.07	0.09	0.04	0.61
NDC Casting Machine	0%	0.05	0.05	0.05	0.07	0.03	0.46
5 Knockout Machines	90%	3.4	2.4	1.4	0.00	0.00	12.81
TOTAL		4.2	3.2	2.2	1.59	1.82	17.32

METHODOLOGY

PTE after control (tons/year) = Maximum throughput (tons/hour) * Emission factor (lb/ton) * 1ton/2000 lbs * 8760 hours/year * (1- Control efficiency %)

Material	Max. Usage Rate (gallons/hour)	Density (lbs/gal)	VOC Content %	PTE of VOC (lbs/hour)	PTE of VOC (tons/year)
Injector Lube	0.05	0.97	30%	0.01	0.06
TOTAL					0.06

METHODOLOGY

PTE VOC (lbs/hour) = Maximum Usage Rate (gal/hour) * Density (lb/gal) * VOC content %

PTE VOC (tons/year) = Maximum usage rate (gal/hour) * Density (lb/gal) * VOC content (%) * 1ton/2000 lbs * 8760 hours/year

**Appendix A: Emission Calculations
From Three (3) HP Die-Casting Machines**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

POTENTIAL TO EMIT BEFORE CONTROLS IN TONS PER YEAR

Emission Units	Maximum Throughput		PM Emission Factor	PTE of PM	PM10 Emission Factor	PTE of PM10	PM2.5 Emission Factor	PTE of PM2.5
	(lbs/hour)	(tons/hour)	(lbs/ton)	(tons/year)	(lb/ton)	(tons/year)	(lb/ton)	(tons/year)
3 Die Casting Machines Mag HPDC #1 - #3	4,500	2.25	0.015	0.15	0.015	0.15	0.015	0.15
TOTAL				0.15		0.15		0.15

PM/PM10/PM2.5 emissions for die-casting units not using sand cores are from FIRE for zinc casting (3-04-008-73), which is the only available emission factor in FIRE for a pure metal of similar atomic wt

METHODOLOGY

Maximum throughput (tons/hour) = Maximum throughput (lbs/hour) * 1ton/2000 lbs

PTE (tons/year) = Maximum throughput (tons/hour) * Emission factor (lb/ton) * 1ton/2000 lbs * 8760 hours/year

Material	Max Usage Rate (gallons/hour)	Density (lbs/gal)	VOC Content %	PTE of VOC (lbs/hour)	PTE of VOC (tons/year)
Injector Lube	0.05	0.97	30%	0.01	0.06
TOTAL					0.06

METHODOLOGY

PTE VOC (lbs/hour) = Maximum Usage Rate (gal/hour) * Density (lb/gal) * VOC content %

PTE VOC (tons/year) = Maximum usage rate (gal/hour) * Density (lb/gal) * VOC content (%) * 1ton/2000 lbs * 8760 hours/year

**KEIHIN IPT Manufacturing, Inc.
Magnesium Melt Furnace
Emission Calculations**

**Appendix A: Emission Calculations
Proposed Magnesium Furnace #4
Aluminum Facilities (Unit 2)**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

STAPPA ALAPCO "Clean Charge" Aluminum Melting Reverberatory Furnace Emission Factor (Nat'l Gas Fired)

Emission Unit	Melt Capacity (lb/hr)	Emission Factor (lb/ton)			Potential Emissions (ton/yr)			Potential PM Emissions (lbs/hr)	Allowable PM Emissions (lbs/hr)
		PM	PM10	PM2.5	PM	PM10	PM2.5		
Mag Furnace #1	1000	1.1	1.1	1.1	2.41	2.41	2.41	0.55	2.58
Mag Furnace #2	1000	1.1	1.1	1.1	2.41	2.41	2.41	0.55	2.58
Mag Furnace #3	1400	1.1	1.1	1.1	3.37	3.37	3.37	0.77	3.23
Mag Furnace #4	1540	1.1	1.1	1.1	3.71	3.71	3.71	0.85	3.44
Total					11.90	11.90	11.90	2.72	11.82

Emission Calculations

Maximum Throughput (tons/hour) = Maximum throughput (lbs/hour) x 1ton/2000 lbs

Potential to Emit (tons/yr) = Maximum throughput (tons/hour) * Emission Factor (lb/ton) * 1ton/2000 lbs * 8760 hours/yr

Potential PM Emissions (lbs/hr) = Maximum throughput (lbs/hr) x 1 ton/2,000 lbs x Emission Factor (lb/ton)

Allowable PM Emissions (lbs/hr) = 4.1x [Maximum Throughput (lbs/hr) x 1ton/2,000 lbs]^{0.67}

Furnace Melt Rate: 700 kg/hr * 2.2 lbs/kg = 1540 lbs/hr

Note: To be conservative, the STAPPA ALAPCO Clean Charge emission factor was used in this analysis. The other emission factors would more accurately represent emissions from the Mg furnaces because they are both electric induction furnaces, as will be the Mg furnace installed at IPT; however, because an emission factor for a magnesium, electric crucible furnace is not available, we are using the most conservative number.

Appendix A: Emission Calculations
PM/PM10 Emissions
Shot Blasting

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

Emission unit ID	Material	Max. Throughput Rate (lb/hour)	* Emission Factor (lb/ton)			PTE of PM (ton/year)	PTE of PM10 (ton/year)	PTE of PM2.5 (ton/year)
			PM	PM10	PM2.5			
Two(2) Shot Blast units in Die Maintenance Area	Glass Bead Blast	32.74	17	1.7	1.7	1.22	0.122	0.122
One (1) Small HPDC VCM Shot Blast	Zinc Shot Blast	7925.38	17	1.7	1.7	295.06	29.506	29.506
One (1) Small HPDC-T/B Zinc Blast machine	Zinc Shot Blast	7925.33	17	1.7	1.7	295.06	29.506	29.506
						591.34	59.13	59.13

Emission factor for Shotblasting is from FIRE, Chapter 14, Grey Iron Foundries (SCC 3-04-003-40)

METHODOLOGY

Max Throughput Rate for Die Maintenance Shot Blast units = 3 die per shift * 80 lbs per die * 1 shift/8hrs = 30 lbs die/hour + 2.74 lbs shot/hour = 32.74 lbs/hr

Max Throughput Rate for zinc shot blast units based on max shot throughput plus 33.33% of the source casting capacity.

PTE of PM/PM10 (tons/year) = Max. throughput rate (lb/hour) * 1 ton/2000 lbs * Emission factor (lb/ton) * 8760 hours/year * 1ton/2000 lbs

POTENTIAL TO EMIT AFTER CONTROLS IN TONS PER YEAR

Emission unit ID	Control Efficiency (%)	PTE of PM (ton/year)	PTE of PM10 (ton/year)	PTE of PM2.5 (ton/year)
Two(2) Shot Blast units in Die Maintenance Area	95%	0.06	0.01	0.01
One (1) Small HPDC VCM Shot Blast	87%	38.36	3.84	3.84
One (1) Small HPDC-T/B Zinc Blast machine	87%	38.36	3.84	3.84
		76.78	7.68	7.68

Appendix A: Emission Calculations
VOC Emissions
From Machining and Washing Process (Unit 4)

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

Emission Unit	Density (lbs/gal)	Max. Usage Rate (gal/hour)	Volatile Content (%)	PTE of VOC (tons/year)	Control Efficiency (%)	PTE of VOC After Control (tons/year)
Machining and Washing	6.42	1.35	100%	38.0	85%	5.69
TOTAL				38.0		5.69

* Machining and washing operation has a Durr thermal oxidizer as control with 85 % destruction efficiency

METHODOLOGY

PTE of VOC (tons/year) = Density (lbs/gal) * Max. usage rate (gal/hour) * Volatile content (%) * 1 ton/2000 lb * 8760 hours/year

**Appendix A: Emission Calculations
VOC Emissions
From Degreasing Operation**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

Emission Unit	Density (lb/gal)	Max. Solvent Consumption (gal/hour)	Max. Usage Rate (tons/year)	Volatile Content (%)	PTE of VOC (tons/year)
Degreasing	8.70	0.017	0.63	100%	0.63
TOTAL					0.63

METHODOLOGY

Maximum usage rate (tons/year) = Maximum solvent consumption (gal/hour) * Density (lb/gal) * 8760 hours/year * 1 ton/2000 lbs

PTE of VOC (tons/year) = Maximum solvent consumption (gal/hour) * Density (lb/gal) * 8760 hours/year * 1 ton/2000 lbs * Volatile Content (%)

**Appendix A: Emission Calculations
Fire Pumps**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

Emissions calculated based on output rating (hp)

Output Horsepower Rating (hp)	287.2
Maximum Hours Operated per Year	500
Potential Throughput (hp-hr/yr)	143,600

	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Potential Emission in tons/yr	0.16	0.16	0.16	0.15	2.23	0.18	0.48

*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

Hazardous Air Pollutants (HAPs)

	Pollutant							Total PAH HAPs***
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	
Emission Factor in lb/hp-hr****	6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06
Potential Emission in tons/yr	4.69E-04	2.06E-04	1.43E-04	1.97E-05	5.93E-04	3.85E-04	4.65E-05	8.44E-05

***PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

****Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

Potential Emission of Total HAPs (tons/yr)	1.95E-03
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Methodology

Emission Factors are from AP42 (Supplement B 10/96), Tables 3.3-1 and 3.3-2

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: Emissions Calculations
Welding and Thermal Cutting**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
			PM/PM10/PM2.5	Mn	Ni	Cr	PM/PM10/PM2.5	Mn	Ni	Cr	
WELDING											
Stick (E7018, 6013, 6213 electrode) 10 per week	1	1.294	0.0184	0.00103	0.000002	0.000006	0.024	0.001	0.000	0.000007764	0.001
Tungsten Inert Gas (TIG)(carbon steel)	2	3.968	0.0055	0.0005			0.044	0.004	0.000	0	0.004
Oxyacetylene(carbon steel)	1	3.086	0.0055	0.0005			0.017	0.002	0.000	0	0.002
EMISSION TOTALS											
Potential Emissions lbs/hr							0.08				0.01
Potential Emissions lbs/day							2.03				0.16
Potential Emissions tons/year							0.37				0.03

METHODOLOGY

There are no emission factors for PM10 or PM2.5. Therefore, it is assumed all PM = PM10 and PM2.5.

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

Emission Factors are from AP-42 Table 12.19-1 and Table 12.19-2

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	Keihin IPT Manufacturing, LLC (formerly known as Keihin IPT Manufacturing, Inc.)
Source Location:	400 West New Road, Greenfield, IN 46140
County:	Hancock
SIC Code:	3714
Permit Renewal No.:	T059-29178-00013
Permit Reviewer:	Kristen Willoughby

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Keihin IPT Manufacturing, LLC (formerly known as Keihin IPT Manufacturing, Inc.) relating to the operation of a stationary electronic fuel injection system for an automotive components manufacturing plant. On April 19, 2010, Keihin IPT Manufacturing, LLC submitted an application to the OAQ requesting to renew its operating permit. Keihin IPT Manufacturing, LLC was issued a Part 70 Operating Permit T059-16006-00013 on January 19, 2006.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

- (a) Aluminum furnaces consisting of:
- (1) Five (5) melt furnaces, identified as GDC-F #1 through GDC-F #5, processing aluminum ingots and flux, equipped with one 0.96 MMBtu/hr natural gas melt burner and one 0.055 MMBtu/hr natural gas holding burner each with a maximum throughput capacity of 1100 lbs per hour. GDC-F #1 and 2 were constructed in 1993, GDC-F #3 was constructed in 1996, and GDC-F #4 and GDC-F #5 were constructed in 1997. GDC-F #1 - #5 are controlled by baghouse #2 during fluxing, exhausting to stack EF101.
 - (2) One (1) aluminum melt furnace, identified as the HPDC-T/B #1, constructed in 1991, equipped with one 2.5 MMBtu/hr natural gas melt burner and one 1.48 MMBtu/hr natural gas holding burner, with a maximum throughput capacity of 1,300 pounds of aluminum ingots and flux per hour, controlled by a baghouse #4 and exhausting at stack EF120.
 - (3) One (1) gas aluminum melt identified as the Large HPDC-2pc furnace, constructed in 2003, equipped with one 1.265 MMBtu/hr natural gas melt burner and one 1.091 MMBtu/hr natural gas holding burner, with a maximum throughput rate capacity of 1,500 pounds of aluminum ingots and flux per hour, controlled by a baghouse #4, and exhausting at stack EF120.
 - (4) One (1) gas aluminum melt identified as the Small HPDC-6AT furnace, constructed in 2003, equipped with one 1.265 MMBtu/hr natural gas melt burner and one 1.091 MMBtu/hr natural gas holding burner, with a maximum throughput rate capacity of 1,500 pounds of aluminum ingots and flux per hour, controlled by a baghouse #4, and exhausting at stack EF120.

- (5) One (1) aluminum melt furnace, identified as the Small HPDC-VCM Striko furnace, constructed in 2006, with a maximum throughput capacity of 1,650 pounds of aluminum ingots per hour, with a 2.322 MMBtu/hr natural gas burner, and exhausting at stack EF75.
- (b) Unit 2 Aluminum facilities consisting of:
- (1) Six (6) shell core machines, identified as GDC-Shellcore #1 through #5 and NDC-Shellcore #10, constructed in 1988, each with a maximum throughput capacity of 228 pounds of sand per hour, controlled by a baghouse and exhausting at stack EF-49.
 - (2) Ten (10) gravity casting machines, identified as GDC-DC #1 through #10, constructed in 1988, each with a maximum throughput capacity of 594 pounds of metal and 157 pounds of sand per hour, respectively, exhausting inside the building and routed to the GDC baghouse through an overhead hood.
 - (3) Five (5) shakeout machines, Shakeout Machines GDC-SO #1 through GDC-SO #5, constructed in 1988, each with a maximum throughput capacity of 975 pounds of metal and 258 pounds of sand per hour, respectively, controlled by five (5) dust collectors, exhausting into the building.
 - (4) Three (3) SV Small HPDC-VCM die-casting machines, identified as VCM #1 through VCM #3, approved for construction in 2007, two installed in 2007, one installed in 2008, each with a maximum throughput capacity of 400 pounds of metal per hour, exhausting into the building.
 - (5) Four (4) aluminum die-casting machines, identified as HPDC-UBE#1 through HPDC-UBE#3 and HPDC-T, constructed in 1988, each with a maximum throughput capacity of 594 pounds of metal per hour, controlled by a baghouse.
- (c) Three (3) magnesium die-casting machines, identified as Mag HPDC #1 and Mag HPDC #2, approved in 2006 for construction, and Mag HPDC #3, approved in 2003 for construction, each with a maximum throughput capacity of 1,500 pounds of metal per hour.
- (d) Two (2) shot blasting units, installed in 2003, each with a maximum throughput rate of 1,000 pounds of glass beads per month, each with emissions controlled by a baghouse. These units are located in the Die Maintenance area. [326 IAC 6-3]
- (e) One (1) shot blasting unit, installed in 2006, with a maximum throughput rate of 2.05 pounds of zinc shot per shift, with emissions controlled by a wet collector. This unit is referred to as the HPDC Small VCM Shot Blast. [326 IAC 6-3]
- (f) One (1) zinc shot blast machine, constructed in 2003, with a maximum blast rate of 2.0 pounds of abrasive per hour, with emissions controlled by a wet collector. This unit is referred to as the Small HPDC-T/T Shot Blast. [326 IAC 6-3]
- (g) Machining and washing processes, consisting of sixteen (16) injector component machines using Viscor and three (3) Napthal washers, identified as Unit 4, constructed in 1989, with a maximum throughput rate of 1.35 gallons of mineral spirits per hour, controlled by one thermal oxidizer.

- (h) Two (2) natural gas-fired boilers, identified as B-1 and B-2, installed in 1989 and 1999, respectively, each with a maximum heat input capacity of 10.46 MMBtu per hour, with emissions uncontrolled and exhausting at stacks B-1 and B-2.

Under NSPS 40 CFR 60, Subpart Dc, Unit B-2 is considered an existing affected unit.

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit

The source also consists of the following emission units that were constructed and/or are operating without a permit:

- (a) An emission unit or activity whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(e)(1) or the exemption levels specified in the following, whichever is lower:
- (1) For lead or lead compounds measured as elemental lead, the exemption level is six-tenths (0.6) ton per year or three and twenty-nine hundredths (3.29) pounds per day.
 - (2) For carbon monoxide (CO), the exemption limit is twenty-five (25) pounds per day.
 - (3) For sulfur dioxide, the exemption level is five (5) pounds per hour or twenty-five (25) pounds per day.
 - (4) For VOC, the exemption limit is three (3) pounds per hour or fifteen (15) pounds per day.
 - (5) For nitrogen oxides (NO_x), the exemption limit is five (5) pounds per hour or twenty-five (25) pounds per day.
 - (6) For an emission unit or activity with potential uncontrolled emissions of particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM₁₀), the exemption level is either five (5) pounds per hour or twenty-five (25) pounds per day.
- (A) Two (2) Small HPDC-6AT die-casting machines, identified as 6AT-1M/C and 6AT-2 M/C, each with a maximum throughput rate of 1,000 pounds of clean aluminum per hour, exhausting into the building. These units were installed in 2011.
- (B) One (1) NDC casting machine, identified NDC II machine, with a maximum throughput rate of 1,500 pounds of clean aluminum per day, exhausting into the building. [326 IAC 6-3-2]
- (b) Activities associated with emergencies, including the following:
- (1) Two (2) stationary fire pumps, constructed in 1989, with a maximum capacity of 147.6 BPH and 139.6 BPH.

Under NESHAP 40 CFR 63, Subpart ZZZZ, these units are considered existing affected units.

Emission Units and Pollution Control Equipment Removed From the Source

The source has removed the following emission units:

- (a) One (1) aluminum melt furnace, identified as Unit 1-A, with a maximum throughput of 2,500 pounds per hour, constructed in 1989, and exhausting inside.

- (b) Trimmers that do not produce fugitive emissions and are equipped with a dust collection or trim material recovery device, such as a bag filter or cyclone. [326 IAC 6-3]

Insignificant Activities

The source also consists of the following insignificant activities:

- (a) An emission unit or activity whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(e)(1) or the exemption levels specified in the following, whichever is lower:
- (1) For lead or lead compounds measured as elemental lead, the exemption level is six-tenths (0.6) ton per year or three and twenty-nine hundredths (3.29) pounds per day.
 - (2) For carbon monoxide (CO), the exemption limit is twenty-five (25) pounds per day.
 - (3) For sulfur dioxide, the exemption level is five (5) pounds per hour or twenty-five (25) pounds per day.
 - (4) For VOC, the exemption limit is three (3) pounds per hour or fifteen (15) pounds per day.
 - (5) For nitrogen oxides (NO_x), the exemption limit is five (5) pounds per hour or twenty-five (25) pounds per day.
 - (6) For an emission unit or activity with potential uncontrolled emissions of particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM₁₀), the exemption level is either five (5) pounds per hour or twenty-five (25) pounds per day.
- (A) One (1) High Pressure Die Casting (HPDC) machine, identified as HPDC #5, with a maximum throughput rate of 1,500 pounds of clean aluminum per hour, controlled by a baghouse EF-60, and exhausting at stack EF-60. This unit was constructed in 2003. [326 IAC 6-3]
- (B) Four (4) closed-system crucible magnesium melt furnaces with melting occurring under an inert gas, identified as Magnesium Furnace #1 and Magnesium Furnace #2, constructed in 2006, each with a maximum throughput capacity of 1000 pounds of magnesium ingots per hour, with emissions uncontrolled, Magnesium Furnace #3, approved for construction in 2007, with a maximum throughput capacity of 1400 pounds of magnesium ingots per hour, with emissions uncontrolled and Magnesium Furnace #4, approved for construction in 2008, with a maximum throughput capacity of 1540 pounds of magnesium ingots per hour, with emissions uncontrolled. [326 IAC 6-3]
- (C) Three (3) mineral spirits storage tanks, two with storage capacities of 2,000 gallons, and one with a storage capacity of 3,000 gallons. These units were constructed in 1989.
- (D) One (1) electrically heated T-6 machine to heat treat parts in the casting area with a maximum throughput rate of 15,000 pounds of water-phosphoric acid per year.
- (E) Sand storage warehouse storing sand used to create the cores.
- (F) Mister Collector collecting water based coolants/cutting oils from the aluminum machining area. The fugitive oils/coolant mists are drawn into an overhead system for collection.

- (b) Paved and unpaved roads and parking lots with public access [326 IAC 6-4].
- (c) Production related activities, including machining where an aqueous cutting coolant continuously floods the machining interface.
 - (1) Machining operations, some units equipped with a mist collector as control, and exhausting indoors. These operations were constructed in 1989.
- (d) The following VOC and HAP storage containers:
 - (1) Vessels storing the following: lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (e) Equipment used exclusively for the following:
 - (1) Filling drums, pails, or other packaging containers with the following: lubricating oils, waxes, or, greases.
- (f) Production related activities, including the following:
 - (1) Application of oils, greases, lubricants, and nonvolatile material as temporary protective coatings.
 - (2) Machining where an aqueous cutting coolant continuously floods the machining interface.
 - (3) Closed loop heating and cooling systems.
 - (4) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, except if subject to 326 IAC 20-6.
 - (A) Degreasing operations, constructed in 1989, using an aqueous based cleaner with a maximum usage rate of 145 gallons per year. This is located in the T/B machining area [326 IAC 8-3-2].
 - (5) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing, cutting torches, soldering, and welding.
- (g) Water based activities, including the following:
 - (1) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.
 - (2) Any operation using aqueous solutions containing less than or equal to one percent (1%) by weight of VOCs excluding HAPs.
 - (3) Quenching operations used with heat treating processes.
- (h) Repair activities, including the following:
 - (1) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.
 - (2) Heat exchanger cleaning and repair.

- (i) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including the following: catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (j) Blow down for any of the following: sight glass, boiler, compressors, pumps and cooling tower.
- (k) Activities associated with emergencies, including the following:
 - (1) On-site fire training approved by the department.
- (l) Mold release agents using low volatile products (vapor pressure less than or equal to two (2) kilo Pascals measured at thirty-eight (38) degrees Centigrade).
- (m) Emissions from a laboratory as defined in 326 IAC 2-7-1(21).
- (n) Five (5) finishing lines with no associated emissions, identified as GDC-finishing lines #3,5,6,7 and 8, constructed in 1988.

Existing Approvals

Since the issuance of the Part 70 Operating Permit T059-29178-00013 on January 19, 2006, the source has constructed or has been operating under the following additional approvals:

Permit Type	Permit Number	Issuance Date
Interim	059-232011-00013	June 29, 2006
Minor Source Modification	059-23201-00013	August 25, 2006
Significant Permit Modification	059-23450-00013	October 19, 2006
Administrative Amendment	059-25176-00013	September 13, 2007
Administrative Amendment	059-25604-00013	December 10, 2007
Administrative Amendment	059-26816-00013	October 2, 2008
Administrative Amendment	059-28007-00013	December 1, 2008

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.

The following terms and conditions from previous approvals have been revised in this Part 70 Operating Permit Renewal:

- (a) The equipment list was updated to reflect the capacities of units as they were installed, changes in unit ID's and to include unpermitted equipment. The HPDC-T/B #1's capacity was increased in 2005. The increase in potential emissions due to this change was less than the Part 70 modification threshold. Therefore, the source was not required to obtain a Part 70 modification for this change.
- (b) After source wide calculations were completed, including emissions from insignificant activities, it was determined a PSD minor limit was needed to keep the source minor for PM/PM10/PM2.5. A source wide limit was added.
- (c) 326 IAC 6-3-2 limits were revised or added where necessary for units where process rate weights changed or the limit had been left out of the previous permit.

- (d) Preventative maintenance plan requirements were added to the facilities subject to the rule (326 IAC 2-7-5(13)) which were previously missing it.
- (e) Compliance determination and monitoring requirements were added to demonstrate compliance with the source wide PSD minor limit and 326 IAC 6-3-2.
- (f) Record keeping requirements associated with new monitoring requirements were added where necessary.
- (g) New Source Performance Standards have been removed from the D Sections and relocated to new E Sections where they are incorporated by reference. Therefore, Conditions D.4.1 and D.4.4 have been deleted. A Copy of the New Source Performance Standard can be found in its entirety as an attachment to the permit.

Enforcement Issue

IDEM is aware that equipment has been constructed and/or operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled "Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit".

- (a) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.
- (b) Additionally, one (1) sand handling operation and shot blasting unit have been identified as being unpermitted at the source. The potential to emit from these operations require a source modification for which the Permittee is required to submit an application. IDEM is reviewing this matter and will take appropriate action.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Hancock County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective October 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.

¹Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
 Unclassifiable or attainment effective April 5, 2005, for PM2.5.

- (a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are

considered when evaluating the rule applicability relating to ozone. Hancock County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) **PM_{2.5}**
Hancock County has been classified as attainment for PM_{2.5}. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions until 326 IAC 2-2 is revised.
- (c) **Other Criteria Pollutants**
Hancock County has been classified as attainment or unclassifiable in Indiana for all other regulated pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Note: Pursuant to Condition D.1.3, the metal processed at the nine (9) aluminum furnaces (identified as GDC-F #1, GDC-F #2, GDC-F #3, GDC-F #4, GDC-F #5, HPDC-T/B #1, Large HPDC-2pc furnace, Small HPDC-6AT furnace, and SV furnace Small HPDC-VCM Striko furnace) shall be clean aluminum only, where clean aluminum is defined as given below:

- (a) molten aluminum,
- (b) T-bar,
- (c) sow,
- (d) ingot,
- (e) billet,
- (f) pig,
- (g) alloying elements,
- (h) thermally dried aluminum chips,
- (i) aluminum scrap dried at 650 degree Fahrenheit or higher,
- (j) aluminum scrap delacquered/decoated at 900EF or higher,
- (k) other gates and risers,
- (l) aluminum scrap, shapes, and products, and

- (m) scrap material generated on-site by aluminum extruding, rolling, scalping, forging, forming/stamping, cutting, and trimming operations, dried at 650°F or higher or equivalent non-thermal drying process, that are oil- and lubricant-free, unpainted/uncoated, and have no undergone any processes that would cause contamination of the aluminum.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	871.73
PM ₁₀	181.97
PM _{2.5}	161.33
SO ₂	1.68
VOC	66.26
CO	13.83
NO _x	19.86
Single HAP	Greater than 10
Total HAP	Less than 25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, PM10, and PM2.5 is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, because the source met the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

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

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)								
	PM	PM10*	PM2.5	SO ₂	NOx	VOC	CO	Total HAPs	Worst Single HAP
2 Natural Gas-Fired Boilers	0.17	0.68	0.68	0.05	8.98	0.49	7.55	0.17	0.16 (Hexane)
9 Aluminum Melt Furnaces	107.82	65.20	54.16	0.04	6.91	5.40	5.80	7.63	>10 (HCL)
Magnesium Furnaces	11.90	11.90	11.90	-	-	-	-	-	-
6 Shell Core Machines	3.30	3.30	3.30	0.96	1.50	0.06	-	-	-
19 Aluminum Casting Machines	3.48	3.48	3.48	0.48	0.24	3.38	-	-	-
5 Knockout Machines	34.16	23.91	14.31	-	-	12.81	-	-	-
Injector Lube - All Casting	-	-	-	-	-	0.12	-	-	-
3 Magnesium Casting Machines	0.15	0.15	0.15	-	-	-	-	-	-
Shot Blasting	70.82	70.82	70.82	-	-	-	-	-	-
Machine Washing & Processing	-	-	-	-	-	5.69	-	-	-
Degreasing	-	-	-	-	-	0.63	-	-	-
Fire Pumps	0.16	0.16	0.16	0.15	2.23	0.18	0.48	1.95E-03	5.93E-04 (Formaldehyde)
Welding	0.37	0.37	0.37	-	-	-	-	0.03	0.007 (Manganese)
Mineral Spirit Storage Tanks	-	-	-	-	-	0.10	-	-	-
Mister Collector	2.00	2.00	2.00	-	-	-	-	-	-
Miscellaneous Break Cleaners	-	-	-	-	-	5.13	-	5.13	5.00 (Perchloroethylene)
Total PTE of Entire Source	234.34	181.97	161.33	1.68	19.86	33.99	13.99	<25	>10
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA
negl. = negligible *Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".									

- (a) This existing stationary source is not major for PSD because the emissions of each regulated pollutant are less than two hundred fifty (<250) tons per year, and it is not in one of the twenty-eight (28) listed source categories.

Federal Rule Applicability

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 pollutant involved;
- (2) is subject to an emission limitation or standard for that pollutant; and
- (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE of PM (tons/year)	Controlled PTE of PM (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
GDC-F #1	baghouse	Y	10.4	2.59	100	N	N
GDC-F #2	baghouse	Y	10.4	2.59	100	N	N
GDC-F #3	baghouse	Y	10.4	2.59	100	N	N
GDC-F #4	baghouse	Y	10.4	2.59	100	N	N
GDC-F #5	baghouse	Y	10.4	2.59	100	N	N
HPDC-T/B #1	baghouse	Y	12.2	3.06	100	N	N
Large HPDC-2pc furnace	baghouse	Y	14.1	3.53	100	N	N
Small HPDC-6AT	baghouse	Y	14.1	3.53	100	N	N
Fluxing: Chlorination	baghouse	Y	21.0	5.26	100	N	N
GDC-Shellcore #1	baghouse	Y	0.55	0.14	100	N	N
GDC-Shellcore #2	baghouse	Y	0.55	0.14	100	N	N
GDC-Shellcore #3	baghouse	Y	0.55	0.14	100	N	N
GDC-Shellcore #4	baghouse	Y	0.55	0.14	100	N	N
GDC-Shellcore #5	baghouse	Y	0.55	0.14	100	N	N
NDC-Shellcore #10	baghouse	Y	0.55	0.14	100	N	N
GDC-DC #1	baghouse	N	0.23	0.06	100	N	N
GDC-DC #2	baghouse	N	0.23	0.06	100	N	N
GDC-DC #3	baghouse	N	0.23	0.06	100	N	N
GDC-DC #4	baghouse	N	0.23	0.06	100	N	N
GDC-DC #5	baghouse	N	0.23	0.06	100	N	N
GDC-DC #6	baghouse	N	0.23	0.06	100	N	N
GDC-DC #7	baghouse	N	0.23	0.06	100	N	N
GDC-DC #8	baghouse	N	0.23	0.06	100	N	N
GDC-DC #9	baghouse	N	0.23	0.06	100	N	N

Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE of PM (tons/year)	Controlled PTE of PM (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
GDC-DC #10	baghouse	N	0.23	0.06	100	N	N
GDC-SO #1	dust collector	Y	6.8	1.7	100	N	N
GDC-SO #2	dust collector	Y	6.8	1.7	100	N	N
GDC-SO #3	dust collector	Y	6.8	1.7	100	N	N
GDC-SO #4	dust collector	Y	6.8	1.7	100	N	N
GDC-SO #5	dust collector	Y	6.8	1.7	100	N	N
HPDC-UBE #1	baghouse	N	0.23	0.06	100	N	N
HPDC-UBE #2	baghouse	N	0.23	0.06	100	N	N
HPDC-UBE #3	baghouse	N	0.23	0.06	100	N	N
HPDC-T	baghouse	N	0.23	0.06	100	N	N
HPDC #5	baghouse	Y	0.59	0.15	100	N	N
Die Maintenance Shot Blast 1	wet collector	Y	177.09	8.85	100	Y	N
Die Maintenance Shot Blast 2	wet collector	Y	177.09	8.85	100	Y	N
HPDC Small VCM Shot Blast	wet collector	Y	177.07	26.56	100	Y	N
Small HPDC-T/T Shot Blast Machine	wet collector	Y	177.07	26.56	100	Y	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the 2 Die Maintenance Shot Blasters, the HPDC Small VCM Shot Blast, and the Small HPDC-T/T Shot Blast Machine for PM upon issuance of the Title V Renewal. A CAM plan will be incorporated into this Part 70 permit renewal.

NSPS

- (b) The Cleaver Brooks boiler (identified as B-1) is not subject to the requirements of the New Source Performance Standard, 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (326 IAC 12) because it was constructed before June 9, 1989.
- (c) The Cleaver Brooks boiler (identified as B-1) is not subject to the requirements of the New Source Performance Standard, 40 CFR 60, Subpart Da - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (326 IAC 12) because although constructed after September 18, 1978, it has a heat input capacity less than 250 MMBtu per hour.
- (d) The Cleaver Brooks boiler (identified as B-1) is not subject to the requirements of the New Source Performance Standard, 40 CFR 60, Subpart Db - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (326 IAC 12)

because although constructed after June 19, 1984, it has a heat input capacity less than 100 MMBtu per hour.

- (e) The Cleaver Brooks boiler (identified as B-2) is subject to the requirements of the New Source Performance Standard, 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (326 IAC 12) because it was constructed after June 9, 1989 and has a heat input capacity greater than 10 MMBtu/hr and less than 100 MMBtu/hr.

Nonapplicable portions of the NSPS will not be included in the permit. Unit B-2 is subject to the following portions of Subpart Dc.

- (1) 40 CFR 60.40c (a)
- (2) 40 CFR 60.41c
- (3) 40 CFR 60.48c (a), (g)(2), (i), and (j)

- (f) The three (3) existing mineral spirits storage tanks with a combined storage capacity of 7,000 gallons are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb) because their capacities are less than 75 cubic meters (10,567 gallons).
- (g) The requirements of the New Source Performance Standard for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart IIII, are not included in the permit for the two (2) stationary fire pumps. Construction of these units commenced prior to July 11, 2005.

There are no other New Source Performance Standards (326 IAC 12) and 40 CFR part 60 applicable to this facility.

NESHAP

- (h) The machining and washing processes and the degreasing operation are not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63, Subpart T (National Emission Standards for Halogenated Solvent Cleaning (326 IAC 14)), because only non-halogenated solvents are used in these operations.
- (i) This source is not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63.1500, Subpart RRR (National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production) because the die-casting facilities use only clean aluminum charge and aluminum scrap generated within the source. However, a condition given in the Second Minor Permit Revision 059-14848-00013, issued on November 8, 2001, specified the use of clean aluminum only at the aluminum furnaces where clean aluminum is defined as given below:
 - (1) molten aluminum,
 - (2) T-bar,
 - (3) sow,
 - (4) ingot,
 - (5) billet,
 - (6) pig,
 - (7) alloying elements,
 - (8) thermally dried aluminum chips, and
 - (9) aluminum scrap dried at 650 degree Fahrenheit or higher,
 - (10) aluminum scrap de-lacquered/de-coated at 900°F or higher,
 - (11) other gates and risers,
 - (12) aluminum scrap, shapes, and products, and

- (13) scrap material generated on-site by aluminum extruding, rolling, scalping, forging, forming/stamping, cutting, and trimming operations, dried at 650°F or higher or equivalent non-thermal drying process, that are oil- and lubricant-free, unpainted/uncoated, and have no undergone any processes that would cause contamination of the aluminum.

- (j) This source is subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR 63, Subpart DDDDD) for the two (2) natural gas-fired boilers, identified as B-1 and B-2. However, this rule has been stayed by the Environmental Protection Agency to undergo further review. Therefore, it is not being incorporated into this permit at this time.

- (k) This source is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63, Subpart ZZZZ, which is incorporated by reference as 326 IAC 20-82. The unit subject to this rule include the following:
 - (1) Two (2) stationary fire pumps, constructed in 1989, with a maximum capacity of 147.6 BPH and 139.6 BPH.

Nonapplicable portions of the NESHAP will not be incorporated by reference in the permit. The emission unit is subject to the following portions of Subpart ZZZZ:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585 (a), (b), and (d)
- (3) 40 CFR 63.6590 (a)(1)(i), (ii), and (iv)
- (4) 40 CFR 63.6595 (a) and (c)
- (5) 40 CFR 63.6602
- (6) 40 CFR 63.6605
- (7) 40 CFR 63.6625 (f) and (j)
- (8) 40 CFR 63.6630 (c)
- (9) 40 CFR 63.6635
- (10) 40 CFR 63.6640 (a), (b), and (f)(1)
- (11) 40 CFR 63.6645 (a)(5) and (d)
- (12) 40 CFR 63.6655 (a)(1), (2), (4), (b), (d), (e)(2), and (f)
- (13) 40 CFR 63.6660
- (14) 40 CFR 63.6665
- (15) 40 CFR 63.6670
- (16) 40 CFR 63.6675
- (17) Table 2c - 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
- (18) Table 6 - Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices
- (19) Table 8 - Applicability of General Provisions to Subpart ZZZZ

There are no other National Emission Standards for Hazardous Air Pollutants (326 IAC 20) and 40 CFR part 63 applicable to this facility.

State Rule Applicability - Entire Source

326 IAC 2-2 (PSD)

This source's potential to emit of PM is greater than 250 tons per year. Therefore, the source has elected to take the following limits in order to remain a minor source under PSD:

Unit ID	Control	PM Limit (lb/hr)
Die Maintenance Shot Blast 1 & 2	baghouse	4.04
HPDC Small VCM Shot Blast	wet collector	6.06
Small HPDC-T/T Shot Blast Machine	wet collector	6.06

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

326 IAC 2-6 (Emission Reporting)

This source, not located in Lake, Porter, or LaPorte County, is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of VOC and PM10 is less than 250 tons per year; and the potential to emit of CO, NOx, and SO2 is less than 2,500 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(2), triennial reporting is required. An emission statement shall be submitted in accordance with the compliance schedule in 326 IAC 2-6-3 by July 1, 2011, and every three (3) years thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

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

326 IAC 6.5 PM Limitations Except Lake County

This source is not subject to 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

326 IAC 2-4.1 (Major Source of Hazardous Air Pollutants (HAPs))

The operation of this automotive components manufacturing plant was constructed prior to July 27, 1997, the applicability date for this rule. A natural gas fired Cleaver Brooks boiler was installed in 1999 while two (2) aluminum furnaces and two (2) high pressure diecasting machines were added in 2003. These new constructions did not result in the potential to emit of a single HAP and combination of HAPs greater than ten (10) and twenty-five (25) tons per year, respectively. Therefore, the source is not subject to the provisions of 326 IAC 2-4.1.

The source submitted information on October 23, 2003 requesting modifications to the eight (8) aluminum furnaces and aluminum die-casting facilities to increase the throughput-rates to their maximum. This modification, which does not include any new construction or reconstruction of the existing units, results in a potential to emit for a single HAP (HCl) greater than ten (10) tons per year due to fluxing from the furnaces all of which were constructed before July 27, 1997). Therefore, the source is not subject to the provisions of 326 IAC 2-4.1.

State Rule Applicability – Individual Facilities

State Rule Applicability - Aluminum Melt Furnaces

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the:

Summary of Process Weight Rate Limits		
Process / Emission Unit	P (ton/hr)	E (lb/hr)
GDC-F #1	0.55	2.75
GDC-F #2	0.55	2.75
GDC-F #3	0.55	2.75
GDC-F #4	0.55	2.75
GDC-F #5	0.55	2.75
HPDC-T/B #1	0.65	3.07
HPDC-2pc furnace	0.75	3.38
Small HPDC-6AT	0.75	3.38
HPDC-VCM Striko furnace	0.83	3.60
Magnesium Furnace #1	0.55	2.75
Magnesium Furnace #2	0.55	2.75
Magnesium Furnace #3	0.70	3.23
Magnesium Furnace #4	0.77	3.44

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

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

Based on the potential to emit calculations for these units, they can comply with the above limits except when fluxing. The baghouses associated with GDC-F #1, GDC-F #2, GDC-F #3, GDC-F #4, GDC-F #5, HPDC-T/B #1, Large HPDC-2pc furnace, and Large HPDC-6AT shall be in operation at all times when fluxing, in order to comply with the above limit.

State Rule Applicability - Shellcore and Die Casting Facilities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the:

Summary of Process Weight Rate Limits		
Process / Emission Unit	P (ton/hr)	E (lb/hr)
GDC-Shellcore #1	0.62	2.97
GDC-Shellcore #2	0.62	2.97
GDC-Shellcore #3	0.62	2.97

Summary of Process Weight Rate Limits		
Process / Emission Unit	P (ton/hr)	E (lb/hr)
GDC-Shellcore #4	0.62	2.97
GDC-Shellcore #5	0.62	2.97
NDC-Shellcore #10	0.62	2.97
Mag HPDC #1	0.75	3.38
Mag HPDC #2	0.75	3.38
Mag HPDC #3	0.75	3.38
GDC-SO #1	0.49	2.54
GDC-SO #2	0.49	2.54
GDC-SO #3	0.49	2.54
GDC-SO #4	0.49	2.54
GDC-SO #5	0.49	2.54
Die Maintenance Area Shot Blaster 1	2.38	7.33
Die Maintenance Area Shot Blaster 2	2.38	7.33
HPDC Small VCM Shot Blast	2.38	7.33
Small HPDC-T/T Shot Blast Machine	2.38	7.33
HPDC #5	0.75	3.38
NDC II machine	0.75	3.38

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

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
 P = process weight rate in tons per hour

The baghouses and wet collectors shall be in operation at all times the shakeout machines, die maintenance shot blasters, HPDC Small VCM Shot Blaster, and Small HPDC-T/T Shot Blaster are in operation, in order to comply with the above limits.

- (b) The 6 shell core machines, 10 gravity casting machines, 3 SV small HPDC-VCM die casting machines, 2 Small HPDC-6AT die-casting machines, and 4 aluminum die casting machines each have potential emissions less than five hundred fifty-one thousandths (0.551) pound per hour. Therefore, the requirements of 326 IAC 6-3-2 do not apply.

State Rule Applicability - Machining and Washing and Degreasing Operations

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

The machining and washing process (identified as Unit 4) consisting of an injector component machines, was constructed in 1989 and has potential VOC emissions greater than twenty-five (25) tons per year. Therefore, the source shall comply with the previously approved BACT requirements as given in Operation Permit No. OP30-03-93-0069 issued on March 13, 1989.

Pursuant to 326 IAC 8-1-6, the Durr thermal oxidizer shall be in operation at all times the mineral spirits machining and washing processes are in operation except during periods (not to exceed

12 hours in duration at a time) in which VOC emissions are captured on the zeolite wheel for later desorption and destruction. The thermal incinerator shall maintain a minimum operating temperature, when in use, of 1,350 degree Fahrenheit, or a temperature determined in the most recent compliance test to maintain a minimum overall 85 percent (%) destruction of potential VOC emissions.

326 IAC 8-3-1(Organic Solvent Degreaser Operations)

The machining and washing process (identified as Unit 4) is not subject to the provisions of 326 IAC 8-3-1(Organic Solvent Degreaser Operations) because this facility does not perform degreasing operations. Pursuant to Operation Permit No. OP30-03-93-0069 issued on March 13, 1989, it is subject to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements).

326 IAC 8-3-2 (Cold Cleaner Operations)

The degreasing operation is subject to the requirements of 326 IAC 8-3-2 (Cold Cleaner Operations) because the machining and washing process and degreasing operation were constructed after the January 1, 1980 applicability date for this rule.

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

- (1) Equip the cleaner with a cover;
- (2) Equip the cleaner with a facility for draining cleaned parts;
- (3) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (5) Provide a permanent, conspicuous label summarizing the operation requirements;
- (6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

The degreasing operation was existing before July 1, 1990 applicability date for this rule [326 IAC 8-3-1(b)(2)]. Therefore, this unit is not subject to the requirements of this rule.

326 IAC 8-6 (Organic Solvent Emission Limitations)

The machining and washing process (identified as Unit 4) is not subject to the requirements of 326 IAC 8-6 because this source is located in Hancock County and has a potential to emit of VOC less than one hundred (100) tons per year.

State Rule Applicability - Boilers

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating), the PM emissions from the two (2) Cleaver Brooks boilers (identified as B-1 and B-2) shall not exceed 0.59 and 0.49 pounds per million British thermal units (lbs/MMBtu) of heat input, respectively.

These limitations are based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour heat input. The total source maximum heat input capacity is 10.461 MMBtu/hour for B-1 and 20.922 MMBtu/hour for B-2

326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations)

The two (2) natural gas-fired boilers (identified as B-1 and B-2) do not have a potential to emit of sulfur dioxide greater than twenty-five (25) tons per year. Therefore, this source is not subject to the provisions of 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations).

State Rule Applicability - Insignificant Activities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (a) The 2 fire pumps each have potential emissions less than five hundred fifty-one thousandths (0.551) pound per hour. Therefore, the requirements of 326 IAC 6-3-2 do not apply.
- (b) The welding activities at the source consume less than six hundred twenty-five (625) pounds of rod or wire per day. Therefore, the requirements of 326 IAC 6-3-2 do not apply.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

The three (3) mineral spirits storage tanks are not subject to the provisions of 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels) because this source is not located in any of the counties listed under this rule.

326 IAC 12 (New Source Performance Standards)

Pursuant to 326 IAC 12 and 326 IAC 1-1-3, storage tanks which store organic liquids must be reviewed pursuant to the July 1, 2000 version of 40 CFR Part 60, Subpart Kb. As a result, although constructed after July 23, 1984, the three (3) mineral spirits storage tanks are not subject to the requirements of 326 IAC 12 because they each have a capacity less than 40 cubic meters (0,567 gallons).

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- (1) **Particulate Matter**
 - (a) The bag filter dust collectors and wet collectors for PM and PM10 control shall be in operation and control emissions from their associated facilities at all times that the facilities are in operation.
 - (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- (2) **Thermal Oxidizer Temperature**
 - (a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. For purposes of this condition, continuous means no less than one per fifteen (15) minutes. The output of this system shall be recorded every fifteen (15) minutes.
 - (b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limit.
 - (c) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature as observed during the compliant stack test.

Emission Unit	Control Device	Timeframe for Testing	Pollutant	Frequency of Testing
Die Maintenance Area Shot Blasters	baghouse	180 days of permit issuance	PM	Once every 5 years
HPDC Small VCM Shot Blast	wet collector	180 days of permit issuance	PM	Once every 5 years
Small HPDC-T/T Shot Blast Machine	wet collector	180 days of permit issuance	PM	Once every 5 years
One(1) of the following: GDC-DC #1 - #10	test uncontrolled emission factor	180 days of permit issuance	PM/PM10/PM2.5	One time test
mineral spirits machining and washing processes	thermal oxidizer	five (5) years from the date of the most recent valid compliance demonstration	VOC	Once every 5 years

The compliance monitoring requirements applicable to this source are as follows:

Control	Parameter	Frequency	Range	Excursions and Exceedances
Baghouse - GDC-F #1 - #5, HPDC-T/B #1, Large HPDC-2pc, Small HPDC-6AT, GDC-Shellcore #1 - #10, Die Maintenance Are Shot Blasters, & HPDC #5	Water Pressure Drop	Daily	1.0 to 7.0 inches	Response Steps
	Visible Emissions		Normal-Abnormal	
Dust Collector - shakeout machines	Water Pressure Drop	Daily	1.0 to 7.0 inches	Response Steps
Wet Collector - shot blaster (40 CFR 64 - CAM)	Water Pressure Drop	Daily	5.0 to 10.0 inches	Response Steps
Thermal Oxidizer - mineral spirits machining and washing processes	Duct Pressure	Daily	from the most recent valid stack test	Response Steps
	Fan Amperage		from the most recent valid stack test	

- (1) Broken or Failed Bag Detection
 - (a) For a single compartment baghouses 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 have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse'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.

- (2) Scrubber/Mist Eliminator Failure Detection

In the event that a scrubber or mist eliminator's failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps shall be considered a deviation from this permit.

These monitoring conditions are necessary because the baghouses, dust collectors, wet collectors, and mist collector must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations), 326 IAC 2-2 (PSD), and 326 IAC 2-7 (Part 70).

These monitoring conditions are necessary because the thermal oxidizer must operate properly to ensure compliance with 326 IAC 8-1-6 (BACT) and 326 IAC 2-7 (Part 70).

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on April 16, 2010. Additional information was received on October 1, 2010, November 4, 2010, and March 28, 2011.

Conclusion

The operation of this stationary electronic fuel injection system for an automotive components manufacturing plant shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. T059-29178-00013.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Kristen Willoughby at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-3031 or toll free at 1-800-451-6027 extension 3-3031.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

**Appendix A: Emission Calculations
Summary**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-20178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

POTENTIAL TO EMIT BEFORE CONTROLS

Emission Units	PM	PM10	PM2.5	SO ₂	NOx	VOC	CO	CO _{2e}
2 Natural Gas-Fired Boilers	0.17	0.68	0.68	0.05	8.98	0.49	7.55	10,846.59
9 Aluminum Melt Furnaces	107.82	65.20	54.16	0.04	6.91	5.40	5.80	8341.02
Magnesium Furnaces	11.90	11.90	11.90	-	-	-	-	-
6 Shell Core Machines	3.30	3.30	3.30	0.96	1.50	0.06	-	-
20 Aluminum Casting Machines	3.48	3.48	3.48	0.48	0.24	3.38	-	-
5 Knockout Machines	34.16	23.91	14.31	-	-	12.81	-	-
Injector Lube - Aluminum Casting	-	-	-	-	-	0.06	-	-
3 Magnesium Casting Machines	0.15	0.15	0.15	-	-	-	-	-
Injector Lube - Magnesium Casting	-	-	-	-	-	0.06	-	-
Shot Blasting	708.22	70.82	70.82	-	-	-	-	-
Machining and Washing Process (Unit 4)	-	-	-	-	-	37.96	-	-
Degreasing	-	-	-	-	-	0.63	-	-
Fire Pumps	0.16	0.16	0.16	0.15	2.23	0.18	0.48	-
Welding	0.37	0.37	0.37	-	-	-	-	-
Machining Operations**	Neg	Neg	Neg	-	-	-	-	-
Mineral Spirits Storage Tanks*	-	-	-	-	-	0.10	-	-
Mister Collector***	2.00	2.00	2.00	-	-	-	5.13	-
Miscellaneous Brake Cleaners	-	-	-	-	-	-	-	-
TOTAL	871.73	181.97	161.33	1.68	19.86	66.26	13.83	19,187.62

POTENTIAL TO EMIT AFTER CONTROLS

Emission Units	PM	PM10	PM2.5	SO ₂	NOx	VOC	CO
2 Natural Gas-Fired Boilers	0.17	0.68	0.68	0.05	8.98	0.49	7.55
9 Aluminum Melt Furnaces	24.77	14.98	12.44	0.04	6.91	5.40	5.80
Magnesium Furnaces	11.90	11.90	11.90	-	-	-	-
6 Shell Core Machines	0.33	0.33	0.33	0.96	1.50	0.06	-
20 Aluminum Casting Machines	0.49	0.49	0.49	0.48	0.24	3.38	-
5 Knockout Machines	3.42	2.39	1.43	-	-	12.81	-
Injector Lube - Aluminum Casting	-	-	-	-	-	0.06	-
3 Magnesium Casting Machines	0.15	0.15	0.15	-	-	-	-
Injector Lube - Magnesium Casting	-	-	-	-	-	0.06	-
Shot Blasting	70.82	7.08	7.08	-	-	-	-
Machining and Washing Process (Unit 4)	-	-	-	-	-	5.69	-
Degreasing	-	-	-	-	-	0.63	-
Fire Pumps	0.16	0.16	0.16	0.15	2.23	0.18	0.48
Welding	0.37	0.37	0.37	-	-	-	-
Machining Operations**	Neg	Neg	Neg	-	-	-	-
Mineral Spirits Storage Tanks*	-	-	-	-	-	0.10	-
Mister Collector***	2.00	2.00	2.00	-	-	-	5.13
Miscellaneous Brake Cleaners	-	-	-	-	-	-	-
TOTAL	114.57	40.52	37.03	1.68	19.86	33.99	13.83

LIMITED EMISSIONS

Emission Units	PM	PM10	PM2.5	SO ₂	NOx	VOC	CO
2 Natural Gas-Fired Boilers	0.17	0.68	0.68	0.05	8.98	0.49	7.55
9 Aluminum Melt Furnaces	107.82	65.20	54.16	0.04	6.91	5.40	5.80
Magnesium Furnaces	11.90	11.90	11.90	-	-	-	-
6 Shell Core Machines	3.30	3.30	3.30	0.96	1.50	0.06	-
20 Aluminum Casting Machines	3.48	3.48	3.48	0.48	0.24	3.38	-
5 Knockout Machines	34.16	23.91	14.31	-	-	12.81	-
Injector Lube - Aluminum Casting	-	-	-	-	-	0.06	-
3 Magnesium Casting Machines	0.15	0.15	0.15	-	-	-	-
Injector Lube - Magnesium Casting	-	-	-	-	-	0.06	-
Shot Blasting	70.82	70.82	70.82	-	-	-	-
Machining and Washing Process (Unit 4)	-	-	-	-	-	5.69	-
Degreasing	-	-	-	-	-	0.63	-
Fire Pumps	0.16	0.16	0.16	0.15	2.23	0.18	0.48
Welding	0.37	0.37	0.37	-	-	-	-
Machining Operations**	Neg	Neg	Neg	-	-	-	-
Mineral Spirits Storage Tanks*	-	-	-	-	-	0.10	-
Mister Collector***	2.00	2.00	2.00	-	-	-	5.13
Miscellaneous Brake Cleaners	-	-	-	-	-	-	-
TOTAL	234.34	181.97	161.33	1.68	19.86	33.99	13.83

*Mineral Spirits Storage Tanks calculations were done using TANKS 4.0.9d. Toluene was substituted for mineral spirits since mineral spirits is not an option in the program.

**The machining operations are CNC machining units and have negligible emissions. Parts are inserted into the machine, the door is closed and the part is machined. During operation, the machining interface is continuously flooded with an aqueous cutting coolant. After further review, these operations should be listed under the insignificant activity as defined under 326 IAC 2-7-(121)(K)(v).

***Mister Collector emissions were conservatively estimated at 2tpy.

Note 2: HAPs estimates were provided by the source. Worst case cleaning solvents and brake cleaners were inventoried and the maximum HAP content taken to derive the HAP estimates as shown below, except for HCl which results from fluxing in the aluminum furnaces.

HAPs	PTE (tons/year)
Hydrogen Chloride (HCl)	7.5
Hydrogen Fluoride (HF)	0.13
Perchloroethylene	5.00
HAPs from Natural Gas Combustion in Boilers	0.17
HAPs from Natural Gas Combustion in Furnaces	0.13
Welding	0.03
HAPs from Fire Pumps	1.95E-03
TOTAL	12.9

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR<100
Two (2) Cleaver Brooks Boilers (B-1 and B-2)**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

Heat Input Capacity
(MMBtu/hour)

Potential Throughput
(MMCF/year)

20.92 (2 Units Total)

180

	Pollutant						
	PM	* PM10	*PM2.5	SO ₂	** NO _x	VOC	CO
Emission Factor (lb/MMCF)	1.90	7.60	7.60	0.60	100	5.50	84.0
Potential To Emit (tons/year)	0.17	0.68	0.68	0.05	8.98	0.49	7.55

* PM10 and PM_{2.5} emission factors are filterable and condensable PM and PM10 combined.

**Emission factor for NO_x: Uncontrolled = 100 lb/MMCF.

Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (July, 1998).

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

METHODOLOGY

Potential throughput (MMCF/year) = Heat input capacity (MMBtu/hour) * 8760 hours/year * 1 MMCF/1020 MMBtu

PTE (tons/year) = Potential throughput (MMCF/year) * Emission factor (lb/MMCF) * 1 ton/2000 lbs

See next page for HAPs emissions calculations.

Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR<100
Two (2) Cleaver Brooks Boilers (B-1 and B-2)

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

HAPs - Organics

Emission Factor (lb/MMCF)	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential To Emit (tons/year)	1.89E-04	1.08E-04	6.74E-03	1.62E-01	3.05E-04

HAPs - Metals

Emission Factor (lb/MMCF)	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential To Emit (tons/year)	4.49E-05	9.88E-05	1.26E-04	3.41E-05	1.89E-04

Methodology is the same as previous page.

SUM

1.70E-01

The five highest organic and metal HAPs emission factors provided above are from AP-42, Chapter 1.4, Table 1-4.2, 1.4-3 and 1.4-4 (July, 1998).
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Two (2) Cleaver Brooks Boilers (B-1 and B-2)

Greenhouse Gas Emissions

Company Name: Keihin, IPT Mfg., Inc.

Address: 400 West New Road, Greenfield, Indiana 46140

Permit No.: T059-29178-00013

Reviewer: Kristen Willoughby

Date: January 26, 2011

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2	CH4	N2O
	120000	2.3	2.2
Potential Emission in tons/yr	10780.98	0.21	0.20
Summed Potential Emissions in tons/yr	10781.39		
CO2e Total in tons/yr	10,846.59		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emission Calculations
Emissions due to Natural Gas Combustion Only
From Ten (10) Aluminum Melt Furnaces**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

4.8 GDC-F #1-5
0.275 GDC-F #1-5
2.5 HPDC-T/B
1.48 HPDC-T/B
1.265 Large HPDC-2pc
1.091 Large HPDC-2pc
1.265 Large HPDC-6AT
1.091 Large HPDC-6AT
2.322 Small HPDC-VCM

16.089 **Total**

Heat Input Capacity
(MMBtu/hour)

16.1

Potential Throughput
(MMCF/year)

138

Pollutant

	* PM	* PM10	*PM2.5	SO ₂	** NO _x	VOC	CO
Emission Factor (lb/MMCF)	1.90	7.60	7.60	0.60	100	5.5	84.0
Potential To Emit (tons/year)	NA	NA	NA	0.04	6.91	0.38	5.80

* PM and PM10 emissions are included in the emission calculation for melting process because the emission factors are the ones for the furnaces.

**Emission factor for NO_x: Uncontrolled = 100 lb/MMCF.

Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (July, 1998).

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

METHODOLOGY

Potential throughput (MMCF/year) = Heat input capacity (MMBtu/hour) * 8760 hours/year * 1 MMCF/1020 MMBtu

PTE (tons/year) = Potential throughput (MMCF/year) * Emission factor (lb/MMCF) * 1 ton/2000 lbs

See next page for HAPs emissions calculations.

**Appendix A: Emission Calculations
Emissions due to Natural Gas Combustion Only
From Ten (10) Aluminum Melt Furnaces**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

HAPs - Organics

Emission Factor (lb/MMCF)	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential To Emit (tons/year)	1.45E-04	8.29E-05	5.18E-03	1.24E-01	2.35E-04

HAPs - Metals

Emission Factor (lb/MMCF)	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential To Emit (tons/year)	3.45E-05	7.60E-05	9.67E-05	2.63E-05	1.45E-04

Methodology is the same as previous page.

SUM 1.30E-01

The five highest organic and metal HAPs emission factors provided above are from AP-42, Chapter 1.4, Table 1.4-2, 1.4-3 and 1.4-4 (July, 1998).
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Emissions due to Natural Gas Combustion Only
From Ten (10) Aluminum Melt Furnaces
Greenhouse Gas Emissions

Company Name: Keihin, IPT Mfg., Inc.

Address: 400 West New Road, Greenfield, Indiana 46140

Permit No.: T059-29178-00013

Reviewer: Kristen Willoughby

Date: January 26, 2011

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120000	2.3	2.2
Potential Emission in tons/yr	8290.57	0.16	0.15
Summed Potential Emissions in tons/yr	8290.88		
CO2e Total in tons/yr	8,341.02		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emission Calculations
Particulate Emissions
From Nine (9) Aluminum Melt Furnaces**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

Unit ID	Maximum Throughput Rate (lb/hour) (ton/hour)		E.F PM (lb/ton)	E.F PM10 (lb/ton)	E.F PM2.5 (lb/ton)	E.F VOC (lb/ton)	PTE of PM before control (tons/year)	PTE of PM10 before control (tons/year)	PTE of PM2.5 before control (tons/year)	PTE of VOC (tons/year)	**Control Efficiency (%)	Control Description	PTE of PM after control (tons/year)	PTE of PM10 after control (tons/year)	PTE of PM2.5 after control (tons/year)	PTE of PM before control (lb/hour)	** Particulate Emission Limit (lb/hour)
GDC-F #1	1100	0.55	4.3	2.6	2.16	0.2	10.4	6.3	5.2	0.48	90%	Baghouse	1.04	0.63	0.52	2.37	2.75
GDC-F #2	1100	0.55	4.3	2.6	2.16	0.2	10.4	6.3	5.2	0.48	90%	Baghouse	1.04	0.63	0.52	2.37	2.75
GDC-F #3	1100	0.55	4.3	2.6	2.16	0.2	10.4	6.3	5.2	0.48	90%	Baghouse	1.04	0.63	0.52	2.37	2.75
GDC-F #4	1100	0.55	4.3	2.6	2.16	0.2	10.4	6.3	5.2	0.48	90%	Baghouse	1.04	0.63	0.52	2.37	2.75
GDC-F #5	1100	0.55	4.3	2.6	2.16	0.2	10.4	6.3	5.2	0.48	90%	Baghouse	1.04	0.63	0.52	2.37	2.75
HPDC-T/B #1	1300	0.65	4.3	2.6	2.16	0.2	12.2	7.4	6.1	0.57	90%	Baghouse (EF-120)	1.22	0.74	0.61	2.80	3.07
Large HPDC-2pc	1500	0.75	4.3	2.6	2.16	0.2	14.1	8.5	7.1	0.66	90%	Baghouse (EF-120)	1.41	0.85	0.71	3.23	3.38
Large HPDC-6AT	1500	0.75	4.3	2.6	2.16	0.2	14.1	8.5	7.1	0.66	90%	Baghouse (EF-120)	1.41	0.85	0.71	3.23	3.38
Small HPDC-VCM Striko	1650	0.83	4.3	2.6	2.16	0.2	15.5	9.40	7.8	0.72	0%	NA	15.54	9.40	7.81	3.55	3.60
Fluxing: Chlorination	9.6	0.005	1000	532	532.00	0.0	21.0	11.2	11.2	0.00	90%	Baghouse	2.10	1.12	1.12	4.80	0.11
TOTAL							107.8	65.20	54.2	5.02			24.77	14.98	12.44		

Emission factor for PM & PM10 is from AP-42, Table 12.8-2, SCC 3-04-001-03 for Secondary Aluminum Operations, Reveratory Furnace (1995).
Emission factor for VOC is from and FIRE, Industrial Processes - Aluminum (SCC 3-04-001-03).
Emission factor for fluxing: chlorination is from FIRE, Industrial Processes - Aluminum (SCC 3-04-001-04).

** Particulate Emission Limit was calculated using the 326 IAC 6-3 Process Weight Rule.

METHODOLOGY

Maximum throughput (tons/hour) = Maximum throughput (lbs/hour) * 1ton/2000 lbs
PTE before control (tons/year) = Maximum throughput (tons/hour) * Emission factor (lb/ton) * 1ton/2000 lbs * 8760 hours/year
PTE after control (tons/year) = Maximum throughput (tons/hour) * Emission factor (lb/ton) * 1ton/2000 lbs * 8760 hours/year * (1- Control efficiency %)

**Appendix A: Emission Calculations
Aluminum Facilities (Unit 2)**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

POTENTIAL TO EMIT BEFORE CONTROLS IN TONS PER YEAR

Emission Units	Maximum Throughput		PM Emission Factor	PTE of PM	PM10 Emission Factor	PTE of PM10	PM2.5 Emission Factor	PTE of PM2.5	SO ₂ Emission Factor	PTE of SO ₂	NO _x Emission Factor	PTE of NO _x	VOC Emission Factor	PTE of VOC
	(lbs/hour)	(tons/hour)	(lbs/ton)	(tons/year)	(lb/ton)	(tons/year)	(lb/ton)	(tons/year)	(lb/ton)	(tons/year)	(lb/ton)	(tons/year)	(lb/ton)	(tons/year)
6 Shell Core Machines	1368	0.68	1.10	3.30	1.10	3.30	1.10	3.30	0.32	0.96	0.50	1.50	0.02	0.06
14 Casting Machines (Sand Cores)	8316	4.16	0.18	3.28	0.18	3.28	0.18	3.28	0.02	0.36	0.01	0.18	0.14	2.55
3 HPDC-VCN Casting Machines	1200	0.60	0.015	0.04	0.015	0.04	0.015	0.04	0.02	0.05	0.01	0.03	0.14	0.37
1 High Pressure Casting Machine	1500	0.75	0.015	0.05	0.015	0.05	0.015	0.05	0.02	0.07	0.01	0.03	0.14	0.46
2 High Pressure Casting Machines	2000	1.00	0.015	0.07	0.015	0.07	0.015	0.07	0.02	0.09	0.01	0.04	0.14	0.61
NDC Casting Machine	1500	0.75	0.015	0.05	0.015	0.05	0.015	0.05	0.02	0.07	0.01	0.03	0.14	0.46
5 Knockout Machines	4875	2.44	3.20	34.2	2.24	23.9	1.34	14.3	0.00	0.00	0.00	0.00	1.2	12.8
TOTAL				40.9		30.7		21.1		1.59		1.82		17.3

Emission factor for Shell Core Machines from FIRE, Industrial Processes - Grey Iron Foundries (SCC 3-04-003-70) and AP-42, Table 12.10-7 (SCC 3-04-003-19)

Source for VOC emission factor FIRE US EPA 450-90-003 and Form R Reporting of Binder Chemicals in Foundries, 1998. VOC = Formaldehyde VOC = 0.00001 lbs of Formaldehyde per lb of sand = 0.02 lbs per ton of sand

There is no PM/PM10/PM2.5 emission factor for die-casting. Therefore, emission factor of 0.18 lb/ton was taken from an air permit for a clean aluminum processing facility in Kentucky to derive a worst case scenario for units using sand cores. Testing will be required to verify this emission factor.

PM/PM10/PM2.5 emissions for die-casting units not using sand cores are from FIRE for zinc casting (3-04-008-73), which is the only available emission factor in FIRE for a pure metal of similar atomic weight.

Emission factor for SO₂, NO_x, and VOC for all casting machines from FIRE, Industrial Processes - Secondary Metal Production Aluminum (SCC 3-04-001-14)

Emission factor for Knockout Machines from FIRE, Industrial Processes - Grey Iron Foundries (SCC 3-04-003-31) and AP-42 Table 12.10-9

METHODOLOGY

Maximum throughput (tons/hour) = Maximum throughput (lbs/hour) * 1ton/2000 lbs

PTE before control (tons/year) = Maximum throughput (tons/hour) * Emission factor (lb/ton) * 1ton/2000 lbs * 8760 hours/year

POTENTIAL TO EMIT AFTER CONTROLS IN TONS PER YEAR

Emission Units	Control Efficiency %	PTE of PM	PTE of PM10	PTE of PM2.5	PTE of SO ₂	PTE of NO _x	PTE of VOC
		(tons per year)					
6 Shell Core Machines	90%	0.33	0.33	0.33	0.96	1.50	0.06
14 Casting Machines (Sand Cores)	90%	0.33	0.33	0.33	0.36	0.18	2.55
3 HPDC-VCN Casting Machines	0%	0.04	0.04	0.04	0.05	0.03	0.37
2 High Pressure Casting Machines	90%	0.00	0.00	0.00	0.07	0.03	0.46
2 High Pressure Casting Machines	0%	0.07	0.07	0.07	0.09	0.04	0.61
NDC Casting Machine	0%	0.05	0.05	0.05	0.07	0.03	0.46
5 Knockout Machines	90%	3.4	2.4	1.4	0.00	0.00	12.81
TOTAL		4.2	3.2	2.2	1.59	1.82	17.32

METHODOLOGY

PTE after control (tons/year) = Maximum throughput (tons/hour) * Emission factor (lb/ton) * 1ton/2000 lbs * 8760 hours/year * (1- Control efficiency %)

Material	Max. Usage Rate (gallons/hour)	Density (lbs/gal)	VOC Content %	PTE of VOC (lbs/hour)	PTE of VOC (tons/year)
Injector Lube	0.05	0.97	30%	0.01	0.06
TOTAL					0.06

METHODOLOGY

PTE VOC (lbs/hour) = Maximum Usage Rate (gal/hour) * Density (lb/gal) * VOC content %

PTE VOC (tons/year) = Maximum usage rate (gal/hour) * Density (lb/gal) * VOC content (%) * 1ton/2000 lbs * 8760 hours/year

**Appendix A: Emission Calculations
From Three (3) HP Die-Casting Machines**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

POTENTIAL TO EMIT BEFORE CONTROLS IN TONS PER YEAR

Emission Units	Maximum Throughput		PM Emission Factor	PTE of PM	PM10 Emission Factor	PTE of PM10	PM2.5 Emission Factor	PTE of PM2.5
	(lbs/hour)	(tons/hour)	(lbs/ton)	(tons/year)	(lb/ton)	(tons/year)	(lb/ton)	(tons/year)
3 Die Casting Machines Mag HPDC #1 - #3	4,500	2.25	0.015	0.15	0.015	0.15	0.015	0.15
TOTAL				0.15		0.15		0.15

PM/PM10/PM2.5 emissions for die-casting units not using sand cores are from FIRE for zinc casting (3-04-008-73), which is the only available emission factor in FIRE for a pure metal of similar atomic wt

METHODOLOGY

Maximum throughput (tons/hour) = Maximum throughput (lbs/hour) * 1ton/2000 lbs

PTE (tons/year) = Maximum throughput (tons/hour) * Emission factor (lb/ton) * 1ton/2000 lbs * 8760 hours/year

Material	Max Usage Rate (gallons/hour)	Density (lbs/gal)	VOC Content %	PTE of VOC (lbs/hour)	PTE of VOC (tons/year)
Injector Lube	0.05	0.97	30%	0.01	0.06
TOTAL					0.06

METHODOLOGY

PTE VOC (lbs/hour) = Maximum Usage Rate (gal/hour) * Density (lb/gal) * VOC content %

PTE VOC (tons/year) = Maximum usage rate (gal/hour) * Density (lb/gal) * VOC content (%) * 1ton/2000 lbs * 8760 hours/year

**KEIHIN IPT Manufacturing, Inc.
Magnesium Melt Furnace
Emission Calculations**

**Appendix A: Emission Calculations
Proposed Magnesium Furnace #4
Aluminum Facilities (Unit 2)**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

STAPPA ALAPCO "Clean Charge" Aluminum Melting Reverberatory Furnace Emission Factor (Nat'l Gas Fired)

Emission Unit	Melt Capacity (lb/hr)	Emission Factor (lb/ton)			Potential Emissions (ton/yr)			Potential PM Emissions (lbs/hr)	Allowable PM Emissions (lbs/hr)
		PM	PM10	PM2.5	PM	PM10	PM2.5		
Mag Furnace #1	1000	1.1	1.1	1.1	2.41	2.41	2.41	0.55	2.58
Mag Furnace #2	1000	1.1	1.1	1.1	2.41	2.41	2.41	0.55	2.58
Mag Furnace #3	1400	1.1	1.1	1.1	3.37	3.37	3.37	0.77	3.23
Mag Furnace #4	1540	1.1	1.1	1.1	3.71	3.71	3.71	0.85	3.44
Total					11.90	11.90	11.90	2.72	11.82

Emission Calculations

Maximum Throughput (tons/hour) = Maximum throughput (lbs/hour) x 1ton/2000 lbs

Potential to Emit (tons/yr) = Maximum throughput (tons/hour) * Emission Factor (lb/ton) * 1ton/2000 lbs * 8760 hours/yr

Potential PM Emissions (lbs/hr) = Maximum throughput (lbs/hr) x 1 ton/2,000 lbs x Emission Factor (lb/ton)

Allowable PM Emissions (lbs/hr) = 4.1x [Maximum Throughput (lbs/hr) x 1ton/2,000 lbs]^{0.67}

Furnace Melt Rate: 700 kg/hr * 2.2 lbs/kg = 1540 lbs/hr

Note: To be conservative, the STAPPA ALAPCO Clean Charge emission factor was used in this analysis. The other emission factors would more accurately represent emissions from the Mg furnaces because they are both electric induction furnaces, as will be the Mg furnace installed at IPT; however, because an emission factor for a magnesium, electric crucible furnace is not available, we are using the most conservative number.

Appendix A: Emission Calculations
PM/PM10 Emissions
Shot Blasting

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

Emission unit ID	Material	Max. Throughput Rate (lb/hour)	* Emission Factor (lb/ton)			PTE of PM (ton/year)	PTE of PM10 (ton/year)	PTE of PM2.5 (ton/year)
			PM	PM10	PM2.5			
Two(2) Shot Blast units in Die Maintenance Area	Glass Bead Blast	9510.74	17	1.7	1.7	354.08	35.408	35.408
One (1) Small HPDC VCM Shot Blast	Zinc Shot Blast	4756.05	17	1.7	1.7	177.07	17.707	17.707
One (1) Small HPDC-1/T Zinc Blast machine	Zinc Shot Blast	4756.00	17	1.7	1.7	177.07	17.707	17.707
						708.22	70.82	70.82

Emission factor for Shotblasting is from FIRE, Chapter 14, Grey Iron Foundries (SCC 3-04-003-40)

METHODOLOGY

Max Throughput Rate based on max shot throughput plus 20% of the source casting capacity.

PTE of PM/PM10 (tons/year) = Max. throughput rate (lb/hour) * 1 ton/2000 lbs * Emission factor (lb/ton) * 8760 hours/year * 1ton/2000 lbs

POTENTIAL TO EMIT AFTER CONTROLS IN TONS PER YEAR

Emission unit ID	Control Efficiency (%)	PTE of PM (ton/year)	PTE of PM10 (ton/year)	PTE of PM2.5 (ton/year)
Two(2) Shot Blast units in Die Maintenance Area	95%	17.70	1.77	1.77
One (1) Small HPDC VCM Shot Blast	85%	26.56	2.66	2.66
One (1) Small HPDC-1/T Zinc Blast machine	85%	26.56	2.66	2.66
		70.82	7.08	7.08

Appendix A: Emission Calculations
VOC Emissions
From Machining and Washing Process (Unit 4)

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

Emission Unit	Density (lbs/gal)	Max. Usage Rate (gal/hour)	Volatile Content (%)	PTE of VOC (tons/year)	Control Efficiency (%)	PTE of VOC After Control (tons/year)
Machining and Washing	6.42	1.35	100%	38.0	85%	5.69
TOTAL				38.0		5.69

* Machining and washing operation has a Durr thermal oxidizer as control with 85 % destruction efficiency

METHODOLOGY

PTE of VOC (tons/year) = Density (lbs/gal) * Max. usage rate (gal/hour) * Volatile content (%) * 1 ton/2000 lb * 8760 hours/year

**Appendix A: Emission Calculations
VOC Emissions
From Degreasing Operation**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

Emission Unit	Density (lb/gal)	Max. Solvent Consumption (gal/hour)	Max. Usage Rate (tons/year)	Volatile Content (%)	PTE of VOC (tons/year)
Degreasing	8.70	0.017	0.63	100%	0.63
TOTAL					0.63

METHODOLOGY

Maximum usage rate (tons/year) = Maximum solvent consumption (gal/hour) * Density (lb/gal) * 8760 hours/year * 1 ton/2000 lbs

PTE of VOC (tons/year) = Maximum solvent consumption (gal/hour) * Density (lb/gal) * 8760 hours/year * 1 ton/2000 lbs * Volatile Content (%)

**Appendix A: Emission Calculations
Fire Pumps**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

Emissions calculated based on output rating (hp)

Output Horsepower Rating (hp)	287.2
Maximum Hours Operated per Year	500
Potential Throughput (hp-hr/yr)	143,600

	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Potential Emission in tons/yr	0.16	0.16	0.16	0.15	2.23	0.18	0.48

*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

Hazardous Air Pollutants (HAPs)

	Pollutant							Total PAH HAPs***
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	
Emission Factor in lb/hp-hr****	6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06
Potential Emission in tons/yr	4.69E-04	2.06E-04	1.43E-04	1.97E-05	5.93E-04	3.85E-04	4.65E-05	8.44E-05

***PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

****Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

Potential Emission of Total HAPs (tons/yr)	1.95E-03
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Methodology

Emission Factors are from AP42 (Supplement B 10/96), Tables 3.3-1 and 3.3-2

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: Emissions Calculations
Welding and Thermal Cutting**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Permit No.: T059-29178-00013
Reviewer: Kristen Willoughby
Date: January 26, 2011

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
			PM/PM10/PM2.5	Mn	Ni	Cr	PM/PM10/PM2.5	Mn	Ni	Cr	
WELDING											
Stick (E7018, 6013, 6213 electrode) 10 per week	1	1.294	0.0184	0.00103	0.000002	0.000006	0.024	0.001	0.000	0.000007764	0.001
Tungsten Inert Gas (TIG)(carbon steel)	2	3.968	0.0055	0.0005			0.044	0.004	0.000	0	0.004
Oxyacetylene(carbon steel)	1	3.086	0.0055	0.0005			0.017	0.002	0.000	0	0.002
EMISSION TOTALS											
Potential Emissions lbs/hr							0.08				0.01
Potential Emissions lbs/day							2.03				0.16
Potential Emissions tons/year							0.37				0.03

METHODOLOGY

There are no emission factors for PM10 or PM2.5. Therefore, it is assumed all PM = PM10 and PM2.5.
 *Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.
 Emission Factors are from AP-42 Table 12.19-1 and Table 12.19-2
 Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)
 Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day
 Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

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

TO: John Newby
Keihin IPT Manufacturing, Inc
9900 Westpoint Dr. Ste 132
Indianapolis, IN 46256

DATE: October 20, 2011

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

SUBJECT: Final Decision
Title V - Renewal
059-29178-00013

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Kevan Mulherin (Vice President)
Kathy Moore (KERAMIDA Environmental, Inc)
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Thomas W. Easterly
Commissioner

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October 20, 2011

TO: Hancock County Public Library

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

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

Applicant Name: Keihin IPT Manufacturing, Inc
Permit Number: 059-29178-00013

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	MIDENNEY 10/20/2011 Keihin IPT Mfg., Inc 059-29178-00013 (final)		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		John Newby Keihin IPT Mfg., Inc 9900 Westpoint Dr, Ste 132 Indianapolis IN 46256 (Source CAATS) via confirm delivery										
2		Kevan Mulherin VP Keihin IPT Mfg., Inc 400 West New Rd Greenfield IN 46140 (RO CAATS)										
3		Hancock County Commissioners 111 American Legion #219 Greenfield IN 46140 (Local Official)										
4		Hancock County Public Library 900 West McKenzie Greenfield IN 46140-1741 (Library)										
5		Hancock County Health Department 111 America Legion Greenfield IN 46140-2365 (Health Department)										
6		Greenfield City Council and Mayors Office 10 S. State St. Greenfield IN 46140 (Local Official)										
7		Mrs. Kathy Moore KERAMIDA Environmental, Inc. 401 North College Indianapolis IN 46202 (Consultant)										
8		Timothy Scroggins 3171 W 1000 N Fortville IN 46040 (Affected Party)										
9		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 (Affected Party)										
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