



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: August 25, 2006
RE: Keihin IPT Manufacturing / 059-23201-00013
FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER-MOD.dot 03/23/06



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Mr. Daniel O'Connor
Keihin IPT Manufacturing, Inc.
400 West New Road
Greenfield, Indiana 46140

August 25, 2006

Re: Minor Source Modification No:
059-23201-00013 to
Part 70 Permit No.: 059-16006-00013

Dear Mr. O'Connor:

Keihin IPT Manufacturing, Inc. was issued a Part 70 Permit T059-16006-00013 on January 19, 2006 for a stationary automotive components manufacturing plant making electronic fuel injection systems. An application to modify the source was received on June 8, 2006. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

1. One (1) aluminum melt furnace (identified as SV Furnace), with a maximum throughput capacity of 1,650 pounds of aluminum ingots per hour, and exhausting at stack EF-48b. This unit will be constructed in 2006.
2. Two (2) SV die-casting machines, constructed in 2006, each with a maximum metal capacity of 400 pounds per hour.
3. Two (2) closed-system crucible magnesium melt furnaces (identified as Magnesium Furnace #1 and #2), with melting occurring under an inert gas, each with maximum throughput capacity of 992 pounds of magnesium ingots per hour. Each furnace is equipped with a 200 kW electric heater, 200 kW electric holding furnace, and 60 kW electric ingot pre-heater. These units will be constructed in 2006.
4. Two (2) magnesium die-casting machines (identified as Mag Casting Machine #1 and Magnesium Casting Machine #2), each with a maximum metal capacity of 1,500 pounds per hour. These units will be constructed in 2006.
5. One (1) shot blasting unit (identified as Unit 6) with a maximum throughput rate of 2.05 pounds of zinc shot per hour. This unit will be installed in 2006.

The Permittee also indicated the removal of the following units:

1. One (1) aluminum melt furnace (identified as Unit 1-A) processing aluminum ingots and flux; and
2. Two (2) die-casting machines.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The source may begin construction when the minor source modification has been issued. Operating conditions shall be incorporated into the Part 70 permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(1)(2) and 326 IAC 2-7-12. Operation is not approved until the Significant Permit Modification has been issued.

Pursuant to Contract No. A305-5-65, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Sanobar Durrani, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7810 to speak directly to Ms. Durrani. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, or call (800) 451-6027 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original signed by
Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

Attachments
ERG/SD

cc: File - Hancock County
Hancock County Health Department
Air Compliance Section Inspector – DJ Knotts
Compliance Data Section
Administrative and Development
Technical Support and Modeling - Michele Boner



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PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Keihin IPT Manufacturing, Inc.
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. 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.

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T059-16006-00013	
Issued by: Originally signed by Paul Dubenetzky, Assistant Commissioner Office of Air Quality	Issuance Date: January 19, 2006 Expiration Date: January 19, 2011
First Minor Source Modification No.: 059-23201-00013	Affected Pages: 2, 3, 11, 15, 20-27
Issued by: Original signed by Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: August 25, 2006 Expiration Date: January 19, 2011

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 electronic fuel injection system for an automotive components manufacturing plant.

Responsible Official:	Assistant Vice President
Source Address:	400 West New Road, Greenfield, Indiana 46140
Mailing Address:	400 West New Road, Greenfield, Indiana 46140
General Source Phone Number:	(317) 462-3015
SIC Code:	3714
County Location:	Hancock
Source Location Status:	Nonattainment for Ozone under the 8-hour standard Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Minor Source under Emission Offset Major Source, Section 112 of the Clean Air Act Not in 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) Six (6) aluminum melt furnaces, (identified as Unit 1-A and Unit 1-B), processing aluminum ingots and flux. One (1) furnace (Unit 1-A) has a maximum throughput capacity of 2,500 pounds per hour and a limited throughput not to exceed 1,245 pounds per hour; and five (5) furnaces (Unit 1-B) each have a maximum throughput capacity of 1,100 pounds per hour. These units were constructed between 1989 and 1995.
 - (2) One (1) aluminum melt furnace (identified as HPDC furnace # 3), with a maximum throughput capacity of 1,100 pounds of aluminum ingots and flux per hour, controlled by a baghouse and exhausting at stack EF-120. This unit was constructed in 1991.
 - (3) Two (2) reverberatory furnaces (identified as melt furnace Unit 9 and Unit 10), each with a maximum throughput rate of 1,500 pounds of aluminum ingots and flux per hour, using natural gas as fuel, each with a maximum heat capacity of 1.265 MMBtu per hour, controlled by a baghouse 4, and exhausting at stack EF-120. These units were constructed in 2003.
 - (4) One (1) aluminum melt furnace (identified as SV Furnace), with a maximum throughput capacity of 1,650 pounds of aluminum ingots per hour, and exhausting at stack EF-48b. This unit will be constructed in 2006.

- (b) Unit 2 Aluminum facilities consisting of:
- (1) Eleven (11) shell core machines, constructed in 1988, each with a maximum sand throughput of 228 pounds per hour;
 - (2) Fourteen (14) die-casting machines, constructed in 1988, each with a maximum metal and sand throughput of 594 and 157 pounds per hour respectively;
 - (3) Nine (9) core knockout machines, constructed in 1988, each with a maximum metal and sand throughput of 975 and 258 pounds per hour respectively; and
 - (4) Two (2) SV die-casting machines, constructed in 2006, each with a maximum metal capacity of 400 pounds per hour.

The shell core machines and die-casting machines are controlled by three (3) baghouses and exhaust at stacks EF-49, EF-101, and EF-107. The nine (9) core knockout machines are controlled by nine (9) dust collectors. Two (2) SV die-casting machines are uncontrolled.

- (c) Four (4) aluminum die-casting machines (identified as UBE # 1 through 4), each with a maximum metal and sand throughput of 594 and 157 pounds per hour respectively, controlled by a baghouse and exhausting at stack EF-120. This unit was constructed in 1988.
- (d) Machining and washing processes (identified as Unit 4), consisting of injector component machines with a maximum usage rate of 1.35 gallons of mineral spirits per hour, and using one (1) Durr thermal oxidizer as control. This facility was installed in 1989.
- (e) Two (2) natural gas-fired Cleaver Brooks boilers (identified as B-1 and B-2), each with a maximum heat input capacity of 10.46 MMBtu per hour and exhausting at stacks B-1 and B-2. Boiler B-1 was installed in 1989 and boiler B-2 was installed in 1999.
- (f) Two (2) closed-system crucible magnesium melt furnaces (identified as Magnesium Furnace #1 and #2) with melting occurring under an inert gas, each with maximum throughput capacity of 992 pounds of magnesium ingots per hour. Each furnace is equipped with a 200 kW electric heater, 200 kW electric holding furnace, and 60 kW electric ingot pre-heater. These units will be constructed in 2006.
- (g) Two (2) magnesium die-casting machines (identified as Mag Casting Machine #1 and Magnesium Casting Machine #2), each with a maximum metal capacity of 1,500 pounds per hour. These units will be constructed in 2006.

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

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

- (a) Degreasing operations using an aqueous based cleaner with a maximum usage rate of 145 gallons per year and that is not subject to 326 IAC 20-6. This unit was constructed in 1989 [326 IAC 8-3-2].
- (b) One (1) shot blasting unit (identified as Unit 3) with a maximum throughput rate of 2,833 pounds of zinc shot per month. This unit was installed in 1990 [326 IAC 6-3].
- (c) One (1) shot blasting unit (identified as Unit 5), with a maximum throughput rate of 1,000 pounds of glass beads per month. This unit was installed in 2003 [326 IAC 6-3].
- (d) One (1) shot blasting unit (identified as Unit 6) with a maximum throughput rate of 2.05 pounds of zinc shot per hour. This unit will be installed in 2006. [326 IAC 6-3]

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 13-15-6(a)]

- (a) This permit, T059-16006-00013, 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 Enforceability [326 IAC 2-7-7]

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.4 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.5 Severability [326 IAC 2-7-5(5)]

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

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

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

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

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

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

- (b) One (1) certification shall be included, using the attached Certification Form, 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. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

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

and

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

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

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

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s), by job title, 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 Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for the unit.

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

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

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

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

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

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

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

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

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

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

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

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in 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 T059-16006-00013 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.
- (a) 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 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

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

B.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 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

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

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Request for renewal shall be submitted to:
- Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

B.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
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
- Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.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 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 emissions 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, the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

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

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the

certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (b) Backup fuel switches specifically addressed in, and limited under, Section D of the 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 and 326 IAC 2-7-10.5.

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
Permits Branch, Office of Air Quality
100 North Senate Avenue

Indianapolis, Indiana 46204-2251

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

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

B.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.

B.25 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.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable

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

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

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

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

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

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
Asbestos Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4-1, 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 Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

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

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

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

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

in writing, prior to the end of the initial thirty (30) day compliance schedule, with full justification of the reasons for the inability to meet this date.

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

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

C.11 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.13 Other 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.14 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 prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

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

within ninety (90) days after the date of issuance of this permit.

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

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

- (f) 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.15 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.16 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
- (1) initial inspection and evaluation;
 - (2) recording that operations returned 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 within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (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;
 - (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 maintain the following records:
- (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

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

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

- (a) Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1 an emissions 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 emission 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
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-1.1-1.

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

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

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

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period.

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

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

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

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

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

- (a) Aluminum furnaces consisting of:
- (1) Six (6) aluminum melt furnaces, (identified as Unit 1-A and Unit 1-B), processing aluminum ingots and flux. One (1) furnace (Unit 1-A) has a maximum throughput capacity of 2,500 pounds per hour and a limited throughput not to exceed 1,245 pounds per hour; and five (5) furnaces (Unit 1-B) each have a maximum throughput capacity of 1,100 pounds per hour. These units were constructed between 1989 and 1995.
 - (2) One (1) aluminum melt furnace (identified as HPDC furnace # 3), with a maximum throughput capacity of 1,100 pounds of aluminum ingots and flux per hour, controlled by a baghouse and exhausting at stack EF-120. This unit was constructed in 1991.
 - (3) Two (2) reverberatory furnaces (identified as melt furnace Unit 9 and Unit 10), each with a maximum throughput rate of 1,500 pounds of aluminum ingots and flux per hour, using natural gas as fuel, each with a maximum heat capacity of 1.265 MMBtu per hour, controlled by a baghouse 4, and exhausting at stack EF-120. These units were constructed in 2003.
 - (4) One (1) aluminum melt furnace (identified as SV Furnace), with a maximum throughput capacity of 1,650 pounds of aluminum ingots per hour, and exhausting at stack EF-48b. This unit will be constructed in 2006.
- (f) Two (2) closed-system crucible magnesium melt furnaces (identified as Magnesium Furnace #1 and #2) with melting occurring under an inert gas, each with maximum throughput capacity of 992 pounds of magnesium ingots per hour. Each furnace is equipped with a 200 kW electric heater, 200 kW electric holding furnace, and 60 kW electric ingot pre-heater. These units will be constructed in 2006.

(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 2-2 (PSD)]

- (a) Pursuant to 326 IAC 2-2, the PM and PM10 emissions from the one (1) furnace (Unit 1-A) shall not exceed 5.6 and 3.24 pounds per hour, respectively.
- (b) The maximum throughput capacity of one (1) aluminum melt furnace (identified as Unit 1-A) shall not exceed 1,245 pounds per hour.

Compliance with these limits makes the source minor for 326 IAC 2-2 (PSD) and ensures compliance with condition D.1.2(b).

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes):

- (a) The particulate emissions from the one (1) aluminum melt furnaces (Unit 1-A) shall not exceed 2.98 pounds per hour when operating at a process weight rate of 1,245 pounds per hour.
- (b) The particulate emissions from one (1) aluminum melt furnace (identified as SV Furnace) shall not exceed 3.60 pounds per hour when operating at a process weight rate of 1,650 pounds per hour.

- (c) The particulate emissions from two (2) magnesium melt furnaces (identified as Magnesium Furnace #1 and #2) shall not exceed 2.56 pounds per hour when operating at a process weight rate of 992 pounds per hour.
- (d) The particulate emissions from one (1) aluminum melt furnace (identified as SV Furnace) shall not exceed 3.60 pounds per hour when operating at a process weight rate of 1,650 pounds per hour.
- (e) The particulate emissions from two (2) magnesium melt furnaces (identified as Magnesium Furnace #1 and #2) shall not exceed 2.56 pounds per hour when operating at a process weight rate of 992 pounds per hour.

These limits are based on the following equation:

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

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

D.1.3 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 ten (10) aluminum furnaces (identified as Unit 1-A, Unit 1-B, HPDC furnace #3, Unit 9, Unit 10, and SV 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 RRRR not applicable.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

Between 30 and 36 months after the issuance of this permit and to document compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform PM and PM10 testing on the one (1) aluminum melt furnace (Unit 1-A). Stack testing shall be performed when fluxing. The stack tests shall be completed using methods as approved by the Commissioner. These stack tests shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. PM includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C - Performance Testing.

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

D.1.5 Record Keeping Requirements

- (a) To document compliance with Condition D.1.3, 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.1.3.
- (b) To document compliance with Condition D.1.1 (b), the Permittee shall maintain hourly records of the actual throughput in the one (1) aluminum melt furnace (identified as Unit 1-A).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.6 Reporting Requirements

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

SECTION D.2

FACILITY OPERATION CONDITIONS

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

(b) Unit 2 Aluminum facilities consisting of:

- (1) Eleven (11) shell core machines, constructed in 1988, each with a maximum sand throughput of 228 pounds per hour;
- (2) Fourteen (14) die-casting machines, constructed in 1988, each with a maximum metal and sand throughput of 594 and 157 pounds per hour respectively;
- (3) Nine (9) core knockout machines, constructed in 1988, each with a maximum metal and sand throughput of 975 and 258 pounds per hour respectively; and
- (4) Two (2) SV die-casting machines, constructed in 2006, each with a maximum metal capacity of 400 pounds per hour.

The shell core machines and die-casting machines are controlled by three (3) baghouses and exhaust at stacks EF-49, EF-101, and EF-107. The nine (9) core knockout machines are controlled by nine (9) dust collectors. Two (2) SV die-casting machines are uncontrolled.

- (c) Four (4) aluminum die-casting machines (identified as UBE # 1 through 4), each with a maximum metal and sand throughput of 594 and 157 pounds per hour respectively, controlled by a baghouse and exhausting at stack EF-120. This unit was constructed in 1988.
- (g) Two (2) magnesium die-casting machines (identified as Mag Casting Machine #1 and Magnesium Casting Machine #2), each with a maximum metal capacity of 1,500 pounds per hour. These units will be constructed in 2006.

Insignificant Activities:

- (b) One (1) shot blasting unit, (identified as Unit 3) with a maximum capacity of 2,833 pounds of zinc shot per month. This unit was installed in 1990 [326 IAC 6-3].
- (c) One (1) shot blasting unit (identified as Unit 5), with a maximum throughput rate of 1,000 pounds of glass beads per month. This unit was installed in 2003 [326 IAC 6-3].
- (d) One (1) shot blasting unit (identified as Unit 6) with a maximum throughput rate of 2.05 pounds of zinc shot per hour. This unit will be installed in 2006. [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.2.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the aluminum die casting facilities consisting of eleven (11) shell core machines, twenty (20) die casting machines, and nine (9) core knockout machines, shall not exceed the pound per hour emission limit as shown in the following table:

Emission Units	Process Weight		Particulate Emission Limit (lbs/hour)
	(tons/hour)	(lbs/hour)	
Each of the 11 Shell Core Machines	0.11	228	0.96
Each of the 14 Die Casting Machines	0.38	751	2.13
Each of the 9 Core Knockout Machines	0.62	1,233	2.96
Each of the 2 Mg Die Casting Machines	0.75	1,500	3.38
Each of 2 SV Die Casting Machines	0.20	400	1.39

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:

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

- (b) 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) and 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. Therefore, each of the three (3) shot blasting units shall not exceed 0.551 pounds of particulate emissions per hour.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Part 70 Usage Report Submit Report Quarterly

Source Name: Keihin IPT Manufacturing, Inc.
Source Address: 400 West New Road, Greenfield, Indiana 46140
Mailing Address: 400 West New Road, Greenfield, Indiana 46140
Part 70 Permit No.: T059-16006-00013
Facility: One (1) Aluminum Melt Furnace (Unit 1-A)
Parameter: Throughput of aluminum ingots
Limit: Less than 29,880 pounds per day

Month: _____ Year: _____

Day		Day	
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16			

No deviation occurred in this month.

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

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

Attach a signed certification to complete this report.

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

**Technical Support Document (TSD) for a Minor Source Modification
and a Significant Permit Modification to a Part 70 Permit**

Source Description and Location

Source Name:	Keihin IPT Manufacturing, Inc.
Source Location:	400 West New Road, Greenfield, Indiana 46140
County:	Hancock
SIC Code:	3714
Operation Permit No.:	T059-16006-00013
Operation Permit Issuance Date:	January 19, 2006
Minor Source Modification No.:	059-23201-00013
Significant Permit Modification No.:	059-23450-00013
Permit Reviewer:	ERG/SD

Existing Approvals

The source was issued Part 70 Operating Permit No. 059-16006-00013 on January 19, 2006.

County Attainment Status

The source is located in Hancock County.

Pollutant	Status
PM10	Attainment
PM2.5	Attainment
SO ₂	Attainment
NO ₂	Attainment
8-hour Ozone	Nonattainment
CO	Attainment
Lead	Attainment

- (a) 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 the ozone standards. Hancock County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Hancock County has been classified as attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM_{2.5} emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions.
- (c) Hancock County has been classified as attainment or unclassifiable for all other criteria. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (d) **Fugitive Emissions**
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Emissions (tons/year)
PM	233
PM10	150
SO ₂	1.85
VOC	76.5
CO	12.8
NO _x	18.0

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) This existing source is not a major stationary source under Emission Offset (326 IAC 2-3) because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or more.
- (c) These emissions are based upon the potential to emit calculations for the source as given in Part 70 Permit No.: 059-16006-00013, issued January 19, 2006.

The table below summarizes the potential to emit HAPs for the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

HAPs	Potential To Emit (tons/year)
HCl	16.9
HF	0.13
Perchloroethylene	5.00
MEK	2.44
Organic HAPs from NG Combustion	0.29
TOTAL	24.8

*MEK has been de-listed

- (a) This existing source is a major source of HAPs, as defined in 40 CFR 63.41, because HAPs emissions are greater than ten (10) tons per year for any single HAP but less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).
- (b) These emissions are based upon the potential to emit calculations for the source as given in Part 70 Permit No.: 059-16006-00013, issued January 19, 2006 and as shown in Appendix A.

Actual Emissions

No previous emission data has been received from the source.

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application submitted by Keihin IPT Manufacturing, Inc., on June 8, 2006, relating to the construction of three (3) new furnaces, four (4) die casting machines, and one (1) shot blast unit; and the removal of one (1) existing furnace under Unit 1-A (which included a total of two (2) furnaces) and two (2) die casting machines. The Permittee also requested a revision to the throughput capacity of one (1) remaining furnace under Unit 1-A.

The following is a list of the proposed emission units:

1. One (1) aluminum melt furnace (identified as SV Furnace), with a maximum throughput capacity of 1,650 pounds of aluminum ingots per hour, and exhausting at stack EF-48b. This unit will be constructed in 2006.
2. Two (2) SV die-casting machines, constructed in 2006, each with a maximum metal capacity of 400 pounds per hour.
3. Two (2) closed-system crucible magnesium melt furnaces (identified as Magnesium Furnace #1 and #2) with melting occurring under an inert gas, each with maximum throughput capacity of 992 pounds of magnesium ingots per hour. Each furnace is equipped with a 200 kW electric heater, 200 kW electric holding furnace, and 60 kW electric ingot pre-heater. These units will be constructed in 2006.
4. Two (2) magnesium die-casting machines (identified as Mag Casting Machine #1 and Magnesium Casting Machine #2), each with a maximum metal capacity of 1,500 pounds per hour. These units will be constructed in 2006.
5. One (1) shot blasting unit (identified as Unit 6) with a maximum throughput rate of 2.05 pounds of zinc shot per hour. This unit will be installed in 2006.

The following is the list of the removed emission units:

1. One (1) aluminum melt furnace (identified as Unit 1-A) processing aluminum ingots and flux; and
2. Two (2) die-casting machines.

The Permittee indicated that an existing aluminum melt furnace (identified as Unit 1-A) can only operate at a maximum capacity of 1,245 pounds per hour due to the three (3) die-casting machines downstream, while the rated capacity of the aluminum furnace (identified as Unit 1-A) is 2,500 pounds per hour. The automated aluminum melt transfer equipment can only deliver aluminum to three (3) die-casting machines; and the three (3) die-casting machines fed from the furnace (identified as Unit 1-A) are only capable of processing 1,245 pounds of aluminum per hour. Based on the information provided by the Permittee, a throughput limit was added in existing Condition D.1.2(b) and the process weight rate revised pursuant to 326 IAC 6-3-2 (Particulate Matter Emissions for Manufacturing Processes).

The potential to emit before controls for the aluminum melt furnace identified as Unit 1-A in pounds per hour is less than the allowable emission rate as calculated using the equation in 326 IAC 6-3-2 (see Appendix A). Therefore, operation of the wet scrubber to ensure compliance with 326 IAC 6-3-2 is no longer deemed necessary. The potential to emit before controls for all existing furnaces at the source (identified as Unit 1-B, HPDC 3, Unit 9, and Unit 10) and three (3) new furnaces in pounds per hour are less than the allowable calculated using the equation in 326 IAC 6-3-2. Therefore, existing furnaces (identified as Unit 1-B, HPDC3, Unit 9, and Unit 10) and three (3) new furnaces do not require the use of a wet scrubber or baghouses in order to comply with the allowable emission rate calculated using the equation in 326 IAC 6-3-2. In addition, the potential to emit before controls of PM and PM10 from the aluminum melt furnace, identified as Unit 1-A are equal to 2.68 and 1.62 pounds per hour, which are less than the emission rates listed in Condition D.1.1 (PSD). Therefore, the Permittee will be in compliance with this rate after the modification as described in this section.

Therefore, compliance determination, compliance monitoring, and record-keeping requirements included in the Part 70 permit for the wet scrubber were removed.

Enforcement Issues

There are no pending enforcement actions at the time of this modification.

Emission Calculations

See Appendix A of this document for detailed emission calculations (pages 1 through 11).

Permit Level Determination – Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following tables are used to determine the appropriate permit level under 326 IAC 2-7-10.5. These tables reflect the PTE before controls of the new construction and the modification of the existing unit. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

New Emission Units:

Pollutant	Potential To Emit (tons/year)
PM	21.9
PM10	15.7
SO ₂	0.003
VOC	1.68
CO	0.47
NO _x	0.56

HAPs	Potential To Emit (tons/year)
Benzene	1.17E-05
Dichlorobenzene	6.70E-06
Formaldehyde	4.19E-04
Hexane	1.00E-02
Toluene	1.90E-05
TOTAL	1.05E-02

Modified Emission Units (One (1) aluminum melt furnace (Unit 1-A)):

Pollutant	PTE Before Modification (tons/year)	PTE After Modification (tons/year)	Net Difference (tons/year)
PM	23.5	11.7	11.8
PM10	14.2	7.09	7.15
SO ₂	0.00	0.00	0.00
VOC	1.10	0.55	0.55
CO	0.00	0.00	0.00
NO _x	0.00	0.00	0.00
HAPs	0.00	0.00	0.00

This source modification is subject to 326 IAC 2-7-10.5(d)(4)(a) because this modification results in a potential to emit of PM and PM10 less than 25 tons per year and equal to or greater than 5 tons per year. Additionally, the modification will be incorporated into the Part 70 Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d), because the modification involves a significant change to existing monitoring, reporting, and recordkeeping requirements in the permit, and addition of a throughput limit.

Permit Level Determination – PSD or Emission Offset

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

Emission unit	Potential to Emit After Issuance (tons/year)						
	PM	PM10	SO ₂	VOC	CO	NO _x	HAPs
One (1) New Al Melt Furnace (SV Furnace)	15.5	9.40	3.35E-03	0.72	0.47	0.56	1.05E-2
Two (2) Mg Melt Furnaces #1 and #2	4.78	4.78	0.0	0.87	0.0	0.0	0.0
One (1) Zinc Shot Blasting Unit	0.08	0.01	0.0	0.0	0.0	0.0	0.0
Four (4) High Pressure Die-Casting Machines	1.50	1.50	0.0	0.06	0.0	0.0	0.0
Total From New Units	21.9	15.7	3.35E-03	1.68	0.47	0.56	1.05E-02
Al Melt Furnace	23.5	14.2	0.02	1.10	2.34	2.79	0.0
Two (2) Die Casting Machines	0.59	0.59	0.0	0.0	0.0	0.0	0.0
Modified Al Melt Furnace	23.5	14.2	0.0	1.10	0.0	0.0	0.0
	11.7	7.09		0.55			
Total from Entire Source Prior to Modification	233	150	1.85	76.5	12.8	18.0	24.5
							22.3
Total From Entire Source After Modification	219	144	1.84	76.5	10.9	15.8	22.3

*MEK was de-listed and removed from the total PTE of HAPs.

- (a) This modification to an existing minor stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
- (b) This modification to an existing minor stationary source is not major because the emissions increase is less than the Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Federal Rule Applicability Determination

There are no federal rules that are applicable to the source due to this modification.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 and 2-3 (PSD and Emission Offset)

PSD and Emission Offset applicability is discussed under the Permit Level Determination - PSD and Emission Offset section.

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

The operation of this stationary automotive components manufacturing plant making electronic fuel injection systems will continue to emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, the provisions of 326 IAC 2-4.1 do not apply.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (a) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the one (1) aluminum melt furnace (SV furnace) shall not exceed 3.60 pounds per hour when operating at a process weight rate of 1,650 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the two (2) magnesium melt furnaces (identified as magnesium furnace #1 and #2) shall not exceed 2.56 pound per hour when operating at a process weight rate of 992 pounds per hour, each.
- (c) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the two (2) magnesium die-casting machines (identified as Mag Die-Casting Machines 1 and 2) shall not exceed 3.38 pounds per hour when operating at a process weight rate of 1,500 pounds per hour, each.
- (d) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the two (2) SV Die-Casting Machines shall not exceed 1.39 pounds per hour when operating at a process weight rate of 400 pounds per hour, each.
- (e) The Permittee indicated that an existing aluminum melt furnace (identified as Unit 1-A) can only operate at a maximum capacity of 1,245 pounds per hour due to the three (3) die-casting machines downstream, while the rated capacity of the aluminum furnace (identified as Unit 1-A) is 2,500 pounds per hour. The automated aluminum melt transfer equipment can only deliver aluminum to three (3) die-casting machines; and the three (3) die-casting machines fed from the furnace (identified as Unit 1-A) are only capable of processing 1,245 pounds of aluminum per hour. Based on the information provided by the Permittee, a throughput limit was added in existing Condition D.1.2(b) and the process weight rate revised pursuant to 326 IAC 6-3-2 (Particulate Matter Emissions for Manufacturing Processes) as shown. Pursuant to 326 IAC 6-3-2, the maximum throughput capacity of one (1) aluminum melt furnace (identified as Unit 1-A) shall not exceed 1,245 pounds per hour. The particulate emissions from one (1) aluminum melt furnace (Unit 1-A) shall not exceed 2.98 pounds per hour when operating at a process weight rate of 1,245 pounds per hour.

The pound per hour limitations were calculated with the following equation:

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

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

Based on the potential to emit calculations for the source, the furnaces and die-casting machines are capable of complying with the limit without controls (see Appendix A).

- (f) 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) and 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. Therefore, the one (1) shot blasting unit (identified as Unit 6) shall not exceed 0.551 pounds of particulate emissions per hour.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The Compliance Determination Requirements applicable to this modification are as discussed in T059-16006-00013, issued January 19, 2006.

Testing

The two (2) new Magnesium melt furnaces included in this modification are uncontrolled. The uncontrolled potential to emit PM and PM10 from the two (2) new magnesium melt furnaces were calculated using emission factors from STAPPA/ALAPCO and are equal to 0.55 pounds per hour, each or equivalent to 2.39 tons per year. The Permittee is not required to perform PM and PM10 testing for these furnaces, because the emissions are low and the permittee is in compliance with 326 IAC 6-3-2.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. 059-16006-00013. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Keihin IPT Manufacturing, Inc., on June 8, 2006, relating to the construction and operation of: one (1) Aluminum melt furnace; two (2) Magnesium melt furnaces, one (1) zinc shot blasting unit, and four (4) die-casting machines. The Permittee requested permission to modify the permit to reflect the removal of one (1) furnace under Unit 1-A and two (2) die-casting machines; and revision of the throughput capacity of one (1) remaining furnace under Unit 1-A. Compliance Determination, Monitoring and Record Keeping Requirements for the wet scrubber were removed from the permit due to the reasons listed in the "Description of Proposed Modification" section. The following is a list of the proposed emissions units and pollution control devices:

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) ~~Seven (7)~~ **Six (6)** aluminum melt furnaces, (identified as Unit 1-A and Unit 1-B), processing aluminum ingots and flux, ~~using a wet scrubber as control and exhausting at stack EF-48. Two (2)~~ **One (1)** furnaces (Unit 1-A) ~~each have~~ **has** a maximum throughput capacity of 2,500 pounds per hour **and a limited throughput not to exceed 1,245 pounds per hour**; and five (5) furnaces (Unit 1-B) each have a maximum throughput capacity of 1,100 pounds per hour. These units were constructed between 1989 and 1995.

- ...
- (4) **One (1) aluminum melt furnace (identified as SV Furnace), with a maximum throughput capacity of 1,650 pounds of aluminum ingots per hour, and exhausting at stack EF-48b. This unit will be constructed in 2006.**

(b) Unit 2 Aluminum facilities, ~~constructed in 1988~~ and consisting of:

- (1) Eleven (11) shell core machines, **constructed in 1988**, each with a maximum sand throughput of 228 pounds per hour;
- (2) ~~Sixteen (16)~~ **Fourteen (14)** die-casting machines, **constructed in 1988**, each with a maximum metal and sand throughput of 594 and 157 pounds per hour respectively; ~~and~~
- (3) Nine (9) core knockout machines, **constructed in 1988**, each with a maximum metal and sand throughput of 975 and 258 pounds per hour respectively; **and**
- (4) **Two (2) SV die-casting machines, constructed in 2006, each with a maximum metal capacity of 400 pounds per hour.**

The shell core machines and die-casting machines are controlled by three (3) baghouses and exhaust at stacks EF-49, EF-101, and EF-107. The nine (9) core knockout machines are controlled by nine (9) dust collectors. **Two (2) SV die-casting machines are uncontrolled.**

...

- (f) **Two (2) closed-system crucible magnesium melt furnaces (identified as Magnesium Furnace #1 and #2) with melting occurring under an inert gas, each with maximum throughput capacity of 992 pounds of magnesium ingots per hour. Each furnace is equipped with a 200 kW electric heater, 200 kW electric holding furnace, and 60 kW electric ingot pre-heater. These units will be constructed in 2006.**
- (g) **Two (2) magnesium die-casting machines (identified as Mag Casting Machine #1 and Magnesium Casting Machine #2), each with a maximum metal capacity of 1,500 pounds per hour. These units will be constructed in 2006.**

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

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

...

- (d) **One (1) shot blasting unit (identified as Unit 6) with a maximum throughput rate of 2.05 pounds of zinc shot per hour. This unit will be installed in 2006. [326 IAC 6-3]**

SECTION D.1

FACILITY OPERATION CONDITIONS

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

- (a) Aluminum furnaces consisting of:
 - (1) ~~Seven (7)~~ **Six (6)** aluminum melt furnaces, (identified as Unit 1-A and Unit 1-B), processing aluminum ingots and flux. ~~Two (2)~~ **One (1)** furnaces (Unit 1-A) each have **has** a maximum throughput capacity of 2,500 pounds per hour **and a limited throughput not to exceed 1,245 pounds per hour**; and five (5) furnaces (Unit 1-B) each have a maximum throughput capacity of 1,100 pounds per hour. These units were

constructed between 1989 and 1995.

(2) One (1) aluminum melt furnace (identified as HPDC furnace # 3), with a maximum throughput capacity of 1,100 pounds of aluminum ingots and flux per hour, controlled by a baghouse and exhausting at stack EF-120. This unit was constructed in 1991.

(3) Two (2) reverberatory furnaces (identified as melt furnace Unit 9 and Unit 10), each with a maximum throughput rate of 1,500 pounds of aluminum ingots and flux per hour, using natural gas as fuel, each with a maximum heat capacity of 1.265 MMBtu per hour, controlled by a baghouse 4, and exhausting at stack EF-120. These units were constructed in 2003.

(4) **One (1) aluminum melt furnace (identified as SV Furnace), with a maximum throughput capacity of 1,650 pounds of aluminum ingots per hour, and exhausting at stack EF-48b. This unit will be constructed in 2006.**

(f) **Two (2) closed-system crucible magnesium melt furnaces (identified as Magnesium Furnace #1 and #2) with melting occurring under an inert gas, each with maximum throughput capacity of 992 pounds of magnesium ingots per hour. Each furnace is equipped with a 200 kW electric heater, 200 kW electric holding furnace, and 60 kW electric ingot pre-heater. These units will be constructed in 2006.**

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

D.1.1 Particulate [326 IAC 2-2 (PSD)]

(a) Pursuant to 326 IAC 2-2, the PM and PM10 emissions from ~~each of the two (2)~~ **one (1)** furnaces (Unit 1-A) shall not exceed 5.6 and 3.24 pounds per hour, respectively. ~~These limits are equivalent to 23.5 tons of PM per year and 14.2 tons of PM10 per year, from furnace (Unit 1-A).~~

(b) **The maximum throughput capacity of one (1) aluminum melt furnace (identified as Unit 1-A) shall not exceed 1,245 pounds per hour.**

Compliance with these limits makes the source minor for 326 IAC 2-2 (PSD); **and ensures compliance with condition D.1.2(b).**

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes):

...

(b) The particulate emissions from ~~each of the two (2)~~ **one (1)** aluminum **melt** furnaces (Unit 1-A) shall not exceed ~~4.76~~ **2.98** pounds per hour when operating at a process weight rate of ~~2,500~~ **1,245** pounds per hour.

...

(d) **The particulate emissions from one (1) aluminum melt furnace (identified as SV Furnace) shall not exceed 3.60 pounds per hour when operating at a process weight rate of 1,650 pounds per hour.**

(e) **The particulate emissions from two (2) magnesium melt furnaces (identified as Magnesium Furnace #1 and #2) shall not exceed 2.56 pounds per hour when operating at a process weight rate of 992 pounds per hour.**

D.1.3 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 ten (10) aluminum furnaces (identified as Unit 1-A, Unit 1-B, HPDC furnace #3, Unit 9, and Unit 10, and **SV furnace**) shall be clean aluminum only, where clean aluminum is defined as given below:

...

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

~~A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan of this permit, is required for the two (2) furnaces (Unit 1-A) and control devices.~~

D.1.5 Particulate Matter (PM)

~~To comply with Condition D.1.1, or except as otherwise provided by statute, rule, or this permit the wet scrubber for PM control shall be in operation and control emissions at all times when any of the two (2) furnaces (Unit 1-A) are in operation.~~

D.1.64 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

- (a) ~~Between 30 and 36 months after the issuance of this permit and to document compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform PM and PM10 testing on the one (1) wet scrubber controlling PM and PM10 emissions from the 2,500 pounds per hour furnace (identified as Unit 1-A)~~ **aluminum melt furnace (Unit 1-A)**. Stack testing shall be performed when fluxing. The stack tests shall be completed using methods as approved by the Commissioner. These stack tests shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. PM includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C - Performance Testing.

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

D.1.7 Visible Emissions Notations

- (a) ~~Once per day visible emission notations of the stack exhaust for two (2) aluminum melt furnaces (Unit 1-A) shall be performed during normal daylight operations when fluxing. A trained employee shall record whether the 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 steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.~~

D.1.8 Monitoring of Scrubber Operational Parameters

- (a) ~~The Permittee shall record the pressure drop across the wet scrubber used in conjunction with the two (2) aluminum melt furnaces (Unit 1-A), at least once per day when the two (2) aluminum melt furnaces (Unit 1-A) are in operation. When for any one reading, the pressure drop across the wet scrubber is outside the normal range of 3.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances.~~

~~A pressure reading that is outside the normal range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.~~

- ~~(b) The Permittee shall install a flow meter on the wet scrubber within 120 days of the date of issuance of this permit and shall establish a minimum flow rate necessary to ensure the correct operation of the wet scrubber. After the installation of the flow meter, the Permittee shall record the flow rate at least once per day when the two (2) aluminum melt furnaces (Unit 1-A) are in operation. When for any one reading, the flow rate is less than 3 gallons per minute or the minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps shall be considered a deviation from this permit.~~
- ~~(c) The instruments used for determining the pressure reading and flow rate shall comply with Section C - Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.~~

~~D.1.9 Failure Detection~~

~~In the event that a scrubber malfunction 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 in accordance with Section C - Response to Excursions or Exceedances shall be considered a violation of this permit.~~

~~D.1.405 Record Keeping Requirements~~

~~...~~

- ~~(b) To document compliance with Condition D.1.7, the Permittee shall maintain records of once per day visible emission notations of the stack exhaust for the one (1) aluminum furnace (Unit 1-A).~~
To document compliance with Condition D.1.1(b), the Permittee shall maintain hourly records of the actual throughput in the one (1) aluminum melt furnace (identified as Unit 1-A).
- ~~(c) To document compliance with Condition D.1.8, the Permittee shall maintain records of the following operational parameters for the wet scrubber once per day:~~
- ~~(1) pressure drop; and~~
 - ~~(2) flow rate.~~
- ~~(dc) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.~~

~~D.1.6 Reporting Requirements~~

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

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(b) Unit 2 Aluminum facilities, ~~constructed in 1988~~ and consisting of:

- (1) Eleven (11) shell core machines, **constructed in 1988**, each with a maximum sand throughput of 228 pounds per hour;
- (2) ~~Sixteen (16)~~ **Fourteen (14)** die-casting machines, **constructed in 1988**, each with a maximum metal and sand throughput of 594 and 157 pounds per hour respectively; ~~and~~
- (3) Nine (9) core knockout machines, **constructed in 1988**, each with a maximum metal and sand throughput of 975 and 258 pounds per hour respectively; **and**
- (4) **Two (2) SV die-casting machines, constructed in 2006, each with a maximum metal capacity of 400 pounds per hour.**

The shell core machines and die-casting machines are controlled by three (3) baghouses and exhaust at stacks EF-49, EF-101, and EF-107. The nine (9) core knockout machines are controlled by nine (9) dust collectors. **Two (2) SV die-casting machines are uncontrolled.**

...

(g) **Two (2) magnesium die-casting machines (identified as Mag Casting Machine #1 and Magnesium Casting Machine #2), each with a maximum metal capacity of 1,500 pounds per hour. These units will be constructed in 2006.**

Insignificant Activities:

...

(d) **One (1) shot blasting unit (identified as Unit 6) with a maximum throughput rate of 2.05 pounds of zinc shot per hour. This unit will be installed in 2006. [326 IAC 6-3]**

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

D.2.1 Particulate [326 IAC 6-3-2]

...

Emission Units	Process Weight		Particulate Emission Limit (lbs/hour)
	(tons/hour)	(lbs/hour)	
Each of the 11 Shell Core Machines	0.11	228	0.96
Each of the 2014 Die Casting Machines	0.38	751	2.13
Each of the 9 Core Knockout Machines	0.62	1,233	2.96
Each of the 2 Mg Die Casting Machines	0.75	1,500	3.38
Each of the 2 SV Die Casting Machines	0.20	400	1.39

...

- (b) 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) and 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. Therefore, each of the ~~two (2)~~ **three (3)** shot blasting units shall not exceed 0.551 pounds of particulate emissions per hour.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**Part 70 Usage Report
Submit Report Quarterly**

Source Name: Keihin IPT Manufacturing, Inc.
Source Address: 400 West New Road, Greenfield, Indiana 46140
Mailing Address: 400 West New Road, Greenfield, Indiana 46140
Part 70 Permit No.: T059-16006-00013
Facility: One (1) Aluminum Melt Furnace (Unit 1-A)
Parameter: Throughput of aluminum ingots
Limit: Less than 29,880 pounds per day

Month: _____ Year: _____

Day		Day	
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16			

No deviation occurred in this month.

Deviation/s occurred in this month.

Deviation has been reported on:

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Upon further review, IDEM, OAQ has decided to make the following changes to the permit:

1. The contact information for IDEM, OAQ has been updated throughout the permit as follows:

100 North Senate Avenue
Indianapolis, Indiana 46204-2554**2251**

Telephone Number: 317-233-5674**0178**
Facsimile Number: 317-233-5967**6865**

2. An emergency rule adopted by the Air Pollution Control Board and effective August 7, 2006 revoked 1-hour ozone standard for Indiana. This emergency rule expires on November 1, 2006. Section A.1 was updated as shown.

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 electronic fuel injection system for an automotive components manufacturing plant.

Responsible Official: Assistant Vice President
Source Address: 400 West New Road, Greenfield, Indiana 46140
Mailing Address: 400 West New Road, Greenfield, Indiana 46140
General Source Phone Number: (317) 462-3015
SIC Code: 3714
County Location: Hancock
Source Location Status: Nonattainment for Ozone under the 8-hour standard
Attainment for ozone under the 1-hour standard and for all other criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD
Minor Source under Emission Offset
Major Source, Section 112 of the Clean Air Act
Not in 1 of 28 Source Categories

3. Condition B.16 has been revised to include the correct rule cite.

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

4. IDEM, OAQ has decided to remove (d) concerning nonroad engines from B.17 Permit Amendment or Modification. 40 CFR 89, Appendix A specifically indicates that states are not precluded from regulating the use and operation of nonroad engines, such as regulations on hours of usage, daily mass emission limits, or sulfur limits on fuel; nor are permits regulating such operations precluded, once the engine is no longer new.

B.17 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

....

~~(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.~~

5. 326 IAC 9-1-2 has been SIP approved. Therefore Condition C.4 was revised as shown.

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

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

6. This source is minor under provisions of 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset). Therefore, Conditions C.19 and C.20 were revised as shown.

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

....

- (c) ~~If there is a reasonable possibility that a "project" (as defined in 326 IAC 2-2-1 (qq)) at an existing emissions unit, other than projects at a Clean Unit, which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (ee)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (rr)), the Permittee shall comply with following:~~
 - (1) ~~Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1 (qq)) at an existing emissions unit, document and maintain the following records:~~
 - (A) ~~A description of the project.~~
 - (B) ~~Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.~~
 - (C) ~~A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:~~
 - (i) ~~Baseline actual emissions;~~
 - (ii) ~~Projected actual emissions;~~
 - (iii) ~~Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A); and~~
 - (iv) ~~An explanation for why the amount was excluded, and any netting calculations, if applicable.~~
 - (2) ~~Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and~~
 - (3) ~~Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.~~

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

....

- (f) ~~If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:~~
 - (1) ~~The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx), for that regulated NSR pollutant, and~~
 - (2) ~~The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).~~
- (g) ~~The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:~~

- ~~(1) The name, address, and telephone number of the major stationary source.~~
- ~~(2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C- General Record Keeping Requirements.~~
- ~~(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3).~~
- ~~(4) Any other information that the Permittee deems fit to include in this report,~~

Reports required in this part shall be submitted to:

~~Indiana Department of Environmental Management
Air Compliance Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251~~

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

Conclusion and Recommendation

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 059-23201-00013 and Significant Permit Modification No.: 059-23450-00013. The staff recommended to the Commissioner that this Part 70 Minor Source Modification and Significant Permit Modification be approved.

**Appendix A: Emission Calculations
Emissions due to Natural Gas Combustion Only
From One (1) SV Furnace**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Modification to TV: 059-23201
Pit ID: 059-00013
Reviewer: ERG/SD
Date: August 15, 2006

Heat Input Capacity
(MMBtu/hour)

1.30

Potential Throughput
(MMSCF/year)

11.2

	Pollutant					
	* PM	* PM10	SO ₂	** NO _x	VOC	CO
Emission Factor (lb/MMSCF)	1.90	7.60	0.60	100	5.5	84.0
Potential To Emit (tons/year)	NA	NA	3.35E-03	0.56	0.03	0.47

* PM and PM10 emissions are included in the emission calculation for melting process because the emission factors are the ones for the furnace.

**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.

METHODOLOGY

Potential throughput (MMSCF/year) = Heat input capacity (MMBtu/hour) * 8,760 hours/year * 1 MMSCF/1,020 MMBtu

PTE (tons/year) = Potential throughput (MMSCF/year) * Emission factor (lb/MMSCF) * 1 ton/2,000 lbs

See next page for HAPs emissions calculations.

**Appendix A: Emission Calculations
Emissions due to Natural Gas Combustion Only
From One (1) SV Furnace**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Modification to TV: 059-23201
Pit ID: 059-00013
Reviewer: ERG/SD
Date: August 15, 2006

HAPs - Organics

Emission Factor (lb/MMSCF)	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)	1.17E-05	6.70E-06	4.19E-04	1.00E-02	1.90E-05

SUM

1.05E-02

HAPs - Metals

Emission Factor (lb/MMSCF)	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)	2.79E-06	6.14E-06	7.82E-06	2.12E-06	1.17E-05

Methodology is the same as previous page.

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: Emission Calculations
Particulate Emissions
From One (1) SV Furnace**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Modification to TV: 059-23201
Pit ID: 059-00013
Reviewer: ERG/SD
Date: August 15, 2006

Emission Unit Description	Unit ID	Maximum Throughput Rate		E.F	E.F	E.F	PTE of PM	PTE of PM10	PTE of	PTE of PM	** Particulate
		(lb/hour)	(ton/hour)	PM (lb/ton)	PM10 (lb/ton)	VOC (lb/ton)	before control (tons/year)	before control (tons/year)	VOC (tons/year)	before control (lb/hour)	Emission Limit (lb/hour)
Spool Valve Furnace	SVF	1,650	0.83	4.3	2.6	0.2	15.5	9.40	0.72	3.55	3.60

Emission factor for PM is from AP-42, Table 12.8-2, SCC 3-04-001-03 for Secondary Aluminum Operations, Reverbatory Furnace (1995).

Emission factor for PM10 is from and FIRE, Industrial Processes - Aluminum (SCC 3-04-001-03).

Emission factor for VOC is from and FIRE, Industrial Processes - Aluminum (SCC 3-04-001-03).

** 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 before control (lbs/hour) = Maximum throughput (tons/hour) * Emission factor (lb/ton)

**Appendix A: Emission Calculations
Particulate Emissions
From Two (2) Magnesium Melt Furnaces**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Modification to TV: 059-23201
Pit ID: 059-00013
Reviewer: ERG/SD
Date: August 15, 2006

Emission Unit Description	Unit ID	Maximum Throughput Rate		E.F PM (lb/ton)	E.F PM10 (lb/ton)	E.F VOC (lb/ton)	PTE of PM before control (tons/year)	PTE of PM10 before control (tons/year)	PTE of VOC (tons/year)	PTE of PM before control (lb/hour)	** Particulate Emission Limit (lb/hour)
		(lb/hour)	(ton/hour)								
Mag Furnace	MF#1	992	0.50	1.1	1.1	0.2	2.39	2.39	0.43	0.55	2.56
Mag Furnace	MF#2	992	0.50	1.1	1.1	0.2	2.39	2.39	0.43	0.55	2.56
TOTAL							4.78	4.78	0.87		

Emission factor for PM and PM10 is from STAPPA/ALAPCO.
Emission factor for VOC is from FIRE, Industrial Processes - Aluminum (SCC 3-04-001-03).

** 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 before control (lbs/hour) = Maximum throughput (tons/hour) * Emission factor (lb/ton)

**Appendix A: Emission Calculations
From Two (2) HP Die-Casting Machines**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Modification to TV: 059-23201
Pit ID: 059-00013
Reviewer: ERG/SD
Date: August 15, 2006

POTENTIAL TO EMIT BEFORE CONTROLS IN TONS PER YEAR

Emission Units	Maximum Throughput		PM Emission Factor (lbs/ton)	PTE of PM (tons/year)	PM10 Emission Factor (lb/ton)	PTE of PM10 (tons/year)
	(lbs/hour)	(tons/hour)				
2 Die Casting Machines for SVF	800	0.40	0.18	0.32	0.18	0.32
2 Die Casting Machines for MGF #1 and #2	3,000	1.50	0.18	1.18	0.18	1.18
TOTAL				1.50		1.50

There is no 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 sce

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 %	PTEof 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
PM/PM10 Emissions
From One (1) Shot Blasting (Unit 6)**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Modification to TV: 059-23201
Plt ID: 059-00013
Reviewer: ERG/SD
Date: August 15, 2006

Material	Max. Throughput Rate (lb/hour)	* Emission Factor (lb/ton)		PTE of PM (ton/year)	PTE of PM10 (ton/year)
		PM	PM10		
Zinc Shot Blast	2.05	17	1.7	0.08	0.008
				0.08	0.01

Emission factor for Shotblasting is from FIRE, Chapter 14, Grey Iron Foundries (SCC 3-04-003-40)

METHODOLOGY

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

**Appendix A: Emission Calculations
Emissions due to Natural Gas Combustion Only
From Ten (10) Nine (9) Existing Aluminum Melt Furnaces**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Modification to TV: 059-23201
Plt ID: 059-00013
Reviewer: ERG/SD
Date: August 15, 2006

Heat Input Capacity
(MMBtu/hour)

Potential Throughput
(MMSCF/year)

7.79 (40 9 units total)

66.9

	Pollutant					
	* PM	* PM10	SO ₂	** NO _x	VOC	CO
Emission Factor (lb/MMCF)	7.60	7.60	0.60	100	5.5	84.0
Potential To Emit (tons/year)	NA	NA	0.02	3.35	0.18	2.81

* 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/MMSCF.

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 (MMSCF/year) = Heat input capacity (MMBtu/hour) * 8760 hours/year * 1 MMSCF/1020 MMBtu

PTE (tons/year) = Potential throughput (MMCF/year) * Emission factor (lb/MMSCF) * 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) Nine (9) Existing Aluminum Melt Furnaces

Company Name: Keihin, IPT Mfg., Inc.

Address: 400 West New Road, Greenfield, Indiana 46140

Modification to TV: 059-23201

Plt ID: 059-00013

Reviewer: ERG/SD

Date: August 15, 2006

HAPs - Organics

Emission Factor (lb/MMSCF)	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)	7.02E-05	4.01E-05	2.51E-03	6.02E-02	1.14E-04

SUM

6.29E-02

HAPs - Metals

Emission Factor (lb/MMSCF)	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)	1.67E-05	3.68E-05	4.68E-05	1.27E-05	7.02E-05

Methodology is the same as previous page.

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: Emission Calculations
Particulate Emissions
From Nine (9) Existing Aluminum Melt Furnaces

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Modification to TV: 059-23201
Pit ID: 059-00013
Reviewer: ERG/SD
Date: August 15, 2006

Emission Unit Description	Unit ID	Maximum Throughput Rate		E.F. PM (lb/ton)	E.F. PM10 (lb/ton)	E.F. VOC (lb/ton)	PTE of PM before control (tons/year)	PTE of PM10 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 PM before control (lb/hour)	** Particulate Emission Limit (lb/hour)
		(lb/hour)	(ton/hour)												
Furnace 1	Unit 1 A	2500	4.25	4.30	2.60	0.20	23.5	44.2	4.40	85%	Wet-Scrubber	3.53	2.44	5.38	4.76
Furnace 12	Unit 1 A	1,245	0.62	4.3	2.6	0.2	11.7	7.09	0.55	85%	Wet-Scrubber	4.76	4.06	2.68	2.98

Emission factor for PM is from AP-42, Table 12.8-2, SCC 3-04-001-03 for Secondary Aluminum Operations, Reveratory Furnace (1995).

Emission factor for PM10 is from and FIRE, Industrial Processes - Aluminum (SCC 3-04-001-03).

Emission factor for VOC is from and FIRE, Industrial Processes - Aluminum (SCC 3-04-001-03).

** 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 before control (lb/hour) = 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
Modification to Existing Aluminum Facilities (Unit 2)**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Modification to TV: 059-23201
Plt ID: 059-00013
Reviewer: ERG/SD
Date: August 15, 2006

POTENTIAL TO EMIT BEFORE CONTROLS IN TONS PER YEAR

Emission Units	Total Maximum Throughput		PM Emission Factor	PTE of PM	PM10 Emission Factor	PTE of PM10
	(lbs/hour)	(tons/hour)	(lb/ton)	(tons/year)	(lb/ton)	(tons/year)
20 18 Die Casting Machines	13,518	6.76	0.18	5.33	0.18	5.33
TOTAL				5.33		5.33

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)
There is no 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.
Emission factor for Knockout Machines from FIRE, Industrial Processes - Grey Iron Foundries (SCC 3-04-003-31)

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
		(tons/year)	(tons/year)
20 18 Die Casting Machines	99%	0.96	0.96

Control = Three (3) Baghouses and Ten (10) Dust Collectors with 99 percent efficiency

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 %	PTEof 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
Summary**

Company Name: Keihin, IPT Mfg., Inc.
Address: 400 West New Road, Greenfield, Indiana 46140
Modification to TV: 059-23201
Pit ID: 059-00013
Reviewer: ERG/SD
Date: August 15, 2006

Note: HAPs estimates were provided by the source during the Title V. 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)	16.9
Hydrogen Fluoride (HF)	0.13
Perchloroethylene	5.00
Methyl Ethyl Ketone (MEK)	2.44
TOTAL	22.0

Emission Units	PM	PM10	SO ₂	NOx	VOC	CO
Total PTE from existing units prior to modification	233	150	1.85	18.0	76.5	12.8
New Unit - NG Fired Combustion in One (1) Al Melt Furnace			3.35E-03	0.56	0.03	0.47
New Unit - One (1) Al Melt Furnace	15.5	9.40			0.72	
New Unit - Two (2) Magnesium Melt Furnaces	4.78	4.78			0.87	
New Unit - Four (4) High Pressure Die casting Machines	1.50	1.50			0.058	
New Unit - Shot Blasting Machine	0.08	0.01				
Removed - One (1) Al Melt Furnace 1 (Unit 1-A)	23.54	14.24			1.10	
* Modified - One (1) Al Melt Furnace 2 (Unit 1-A)	23.54	14.24			1.10	
** Modified - One (1) Al Melt Furnace 2 (Unit 1-A)	11.7	7.09			0.55	
Removed - Two (2) Die-Casting Machines	0.59	0.59				
Removed - Combustion from One (1) Al Melt Furnace (Unit 1-A)			0.02	2.79	0.15	2.34
Total PTE from the entire source after modification	219	144	1.84	15.8	76.4	10.9
Total PTE from the new construction only	21.9	15.7	0.003	0.56	1.68	0.47

Note: There is no fluxing in the one (1) new Al melt furnace.

* Before change in the throughput capacity

** After change in the throughput capacity