INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Mitchell E. Daniels, Jr.
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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: September 9, 2005

RE: AeroMetals, Inc / 091-21629-00074

FROM: Paul Dubenetzky
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 1/10/05

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September 9, 2005

Mr. Ron Gigliotti
AeroMetals, Inc.
402 Darlington Street
LaPorte, IN 46350

Re: 091-21629
First Minor Source Modification to
Part 70 Permit No.: 091-12683-00074

Dear Mr. Gigliotti:

AeroMetals, Inc. was issued a Part 70 permit on December 8, 2003, for a steel/brass/copper/aluminum investment casting operation. An application to modify the source was received by the Office of Air Quality (OAQ) on July 28, 2005. Pursuant to the provisions of 326 IAC 2-7-10.5, the modification consists of construction of one (1) caustic metal parts cleaning unit and five (5) natural gas fired ovens.

(a) The new units consist of the following:

(1) ~~One~~ Two (~~1~~**2**) sodium hydroxide solution (caustic) metal parts cleaning unit**s** rated at **a combined capacity of** 4900 pounds steel castings per hour and identified as EU-001 **and EU-169**, constructed in 1979 **and 2005,** with a wet scrubber for caustic fume control identified as CU-001 **and CU-002**, and **each** exhausting at one (1) stack identified as SV-~~001~~**168 and SV-169, respectively**.

(2) ~~Eight~~ Thirteen (~~8~~**13**) natural gas fired ovens, for removing wax from sand molds, each rated at 0.55 million British thermal units (MMBtu) per hour, identified as **EU-180 through EU-192** ~~EU-002, EU-003, EU-004, EU-005, EU-060, EU-061, EU-084, and EU-085~~, each with a maximum capacity of processing 0.46 tons of sand molds per hour, and each exhausting through individual stacks respectively identified as **SV-180 through SV-192** ~~SV-002, SV-003, SV-004, SV-005, SV-022, SV-023, SV-046 and SV-047~~;

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.

This minor source modification authorizes the construction of one (1) caustic metal parts cleaning unit and five (5) natural gas fired ovens. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification (091-21330-00074) in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Adeel Yousuf, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or at 973-575-2555, extension 3252, or dial 1-800-451-6027, and ask for extension 3-6878.

Sincerely,

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

Attachments
AY / EVP

cc: File – LaPorte County
U.S. EPA, Region V
LaPorte County Health Department
Air Compliance Section Inspector – Letty Zepeda
Compliance Data Section
Administrative and Development
Technical Support and Modeling

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PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Aero Metals, Inc.
402 Darlington Street
LaPorte, Indiana 46350

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

(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.

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

Operation Permit No.: T091-12683-00074	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: December 8, 2003 Expiration Date: December 8, 2008

First Minor Source Modification No.: 091-21629-00074	
Original signed by: Nisha Sizemore, Section Chief Permits Branch Office of Air Quality	Pages Affected: 6, 7, 20, 29, 30, 31, 40 and 41 Issuance Date: September 9, 2005

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1, A.3,and A.4 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 steel/brass/copper/aluminum investment casting operation.

Responsible Official:	Ron Gigliotti
Source Address:	402 Darlington Street, LaPorte, Indiana 46350
Mailing Address:	402 Darlington Street, LaPorte, Indiana 46350
General Source Phone Number:	219-326-1976
SIC Code:	3324
County Location:	LaPorte
Source Location Status:	Nonattainment for ozone under 8-hour standard Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

(a) Four (4) electric induction melting furnaces with a total rating of 4,600 pounds metal (steel/brass/copper) per hour:

(1) One (1) 1,460 pound electric induction melting furnaces capable of processing 900 pounds of beryllium containing metal per hour, identified as EU-176 and constructed in July of 1998, controlled for particulate matter by one (1) cyclone, exhausting at one (1) stack identified as SV-157; and

(2) Three (3) 1,460 pound electric induction melting furnaces capable of processing a combined total of 3,700 pounds of non-beryllium containing metal per hour and identified as EU-174, EU-175 and EU-173, constructed in March of 1998, with particulate matter controlled by one (1) cyclone, and exhausting at one (1) stack identified as SV-157.

(b) Three (3) shot blasters identified as EU-032, EU-034, and EU-041, three (3) ceramic mold knock out machines identified as EU-038, EU-039, and EU-040, and one (1) sandblaster identified as EU-272 (exhausting to stack SV-158), all constructed in 1979, with a total maximum capacity of processing 0.49 tons of steel per hour, and all controlled for particulate matter by three (3) cyclones identified as CU-056, CU-057, and CU-058 respectively, and one (1) air collection system (fabric filters), identified as D-003, exhausting at one (1) stack identified as SV-157;

(c) Five (5) friction saws identified as EU-033, EU-035, EU-036, EU-037, and EU-133, each with a maximum capacity of processing 0.98 tons of steel per hour, controlled for particulate matter by five (5) dust collectors, which vent internally;

(d) Two (2) silica sand rain fall sanders identified as EU-049 and EU-050, one (1) silica sand rain fall/ fluidized bed sander identified as EU-111, and one (1) Zircon mix tank identified as EU-131, all constructed in 1979, with a total maximum capacity of 0.084 tons of sand per hour, and controlled for particulate matter by one (1) cartridge type dust collector identified as MC3000-1, which vents internally;

(e) One (1) fluidized sand bed identified as EU-088, one (1) silica sand rain fall sander identified as EU-107, each constructed in 1979, and one (1) rain fall sander/fluidized bed identified as EU-087, constructed in 2001, with a total maximum capacity of 0.042 tons of sand per hour, controlled for particulate matter by one (1) cartridge type dust collector identified as MC3000-2, which vents internally;

(f) Thirteen (13) natural gas fired ovens, for removing wax from sand molds, each rated at 0.55 million British thermal units (MMBtu) per hour, identified as EU-180 through EU-192, each with a maximum capacity of processing 0.46 tons of sand molds per hour, and each exhausting through individual stacks respectively identified as SV-180 through SV-192;

(g) Two (2) sodium hydroxide solution (caustic) metal parts cleaning units rated at a combined capacity of 4,900 pounds steel castings per hour and identified as EU-001and EU-169, constructed in 1979 and 2005, with a wet scrubber for caustic fume control identified as CU-001 and CU-169, and each exhausting at one (1) stack identified as SV-168 and SV-169, respectively.

(h) One (1) sandblast cabinet system identified as EU-260, constructed in 1995, with a maximum capacity of 71.0 pounds of aluminum oxide per hour, utilizing one (1) fabric filter cartridge for particulate matter control, and exhausting through stack SV-160, which vents internally;

(i) Three (3) sandblasters identified as EU-285, EU-286 and EU-287, constructed in 1979, and one (1) sandblaster identified as EU-284, constructed in 2000, each with a maximum capacity of 34.0 pounds of aluminum oxide per hour, utilizing one (1) fabric filter cartridge system for particulate matter control, and exhausting through stack SV-175, which vents internally; and

(j) One (1) shot blaster identified as EU-137, constructed in 2001, one (1) 2-inch degater identified as EU-266, one (1) degater machine identified as EU-267, one (1) 4-inch degater machine identified as EU-269, and one (1) two station key polisher, identified as EU270, with a total maximum capacity of processing 0.099 tons of steel per hour, all controlled for particulate matter by an internal micro air collection system (fabric filters), identified as D-002, exhausting at one (1) stack identified as SV-179, which vents internally;

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

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

(1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:

(i) one (1) boiler system rated at 3.35 MMBtu per hour, constructed in 1983 [326 IAC 6-2];

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

(i) One (1) Safety Kleen Degreaser, identified as EU-294, using less than 145 gallons per 12 month period; and

(ii) One (1) H.D. Degreaser, identified as EU-276, using less than 145 gallons per 12 month period;

(3) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment, venting to one (1) stack SV-178 [326 IAC 6-3-2];

(4) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations [326 IAC 6-3-2]:

(i) One (1) surface grinder identified as EU-012, utilizing one (1) dust collector for particulate matter control, and exhausting through stack SV-080, which vents internally;

(ii) One (1) CNC mill identified as EU-274, with a maximum capacity of 0.23 pounds of carbon per hour, utilizing one (1) fabric filter cartridge for particulate matter control, and exhausting through stack SV-162, which vents internally;

(iii) Two (2) EDM mill machines identified as EU-275 and EU-277, constructed in 1998, each with a maximum capacity of 0.06 pounds of carbon per hour, utilizing one (1) fabric filter cartridge for particulate matter control, and exhausting through stack SV-163, which vents internally;

(iv) One (1) OKK CNC milling machine identified as EU-292, constructed in 1979, controlled for particulate matter by one (1) fabric filter cartridge, and exhausting at one (1) stack identified as SV-176, which vents internally;

(v) Four (4) surface grinders identified as EU-262 through EU-265, each with a maximum capacity of 0.05 pounds of steel per hour, all utilizing one (1) fabric filter cartridge unit for particulate matter control, and exhausting through stack SV-161, which vents internally.

(5) Seven (7) milling machines, each with a maximum capacity of 0.10 pounds of steel per hour [326 IAC 6-3-2];

(6) One (1) two-head degator, identified as EU-046 [326 IAC 6-3-2] ;

(7) One (1) surface mill machine identified as EU-025 [326 IAC 6-3-2] ;

(8) Nineteen (19) miscellaneous belt sanders, grinders, saws, and degaters with particulate matter emissions below 5 pounds per hour [326 IAC 6-3-2]:

(i) Burr King belt sander (Aero-0275);
(ii) Roboform EDM (Aero-0277);
(iii) SBL EDM (Aero-0701);
(iv) grinder (Aero-0702);
(v) Bador grinder (Aero-0273);
(vi) band saw (Aero-0250);
(vii) Cincinnati grinder (Aero-0445);
(viii) Burr King belt sander (Aero-0463);
(ix) 9-inch degator (Aero-0422);
(x) 9-inch degator (Aero-0422B);
(xi) 8-inch degator (Aero-0423);
(xii) Bur King belt sander (Aero-0539);
(xiii) six station degator (Aero-0424);
(xiv) automatic degator (Aero-0444);
(xv) 6-inch belt sander (Aero-0704);
(xvi) Delta band saw (Aero-0372); and
(xvii) three (3) Burr King belt sanders (Aero-0449, Aero-0376, and Aero-0516);

(9) One (1) 400 pound aluminum melt pot with a maximum capacity of melting 225 pounds of aluminum per hour, identified as aluminum melt pot, exhausting internally [326 IAC 6-3-2]; and

(10) One (1) abrasive saw, identified as EU-086, constructed in 2001, controlled for particulate matter by one (1) cyclone, identified as CU-070, exhausting through one (1) stack identified as SV-062, which vents internally [326 IAC 6-3-2].

(b) The following insignificant activities are not specifically regulated, but listed herein per the source's request:

(1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:
(i) one (1) furnace rated at 0.58 MMBtu per hour;

(ii) four (4) furnaces each rated at 0.075 MMBtu per hour;

(iii) twelve (12) heaters each rated at 0.10 MMBtu per hour;

(iv) six (6) natural gas-fired heaters identified as EU-251 through EU-256, each with a maximum heat input rate of 0.58 MMBtu per hour, and exhausting through stacks SV-151 through SV-156, respectively;

(v) one (1) natural gas-fired office heater identified as EU-250, with a maximum heat input rate of 2.2 MMBtu per hour, and exhausting through stack SV-150;

(vi) two (2) natural gas-fired water heaters identified as EU-278 and EU-279, each with a maximum heat input rate of 0.08 MMBtu per hour, and exhausting through stacks SV-164 and SV-165, respectively.

(2) Machining where an aqueous cutting coolant continuously floods the machining interface;

(3) Closed loop heating and cooling systems;

(4) Any operation using aqueous solutions containing less than 1 percent by weight of VOCs excluding HAPs;

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

(6) Heat exchanger cleaning and repair;

(7) Paved and unpaved roads and parking lots with public access;

(8) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process;

(9) Blowdown for any of the following: sight glass; boiler; compressors; pump; and cooling tower;

(10) Cleaners and solvent operations owned and serviced by an outside vendor, characterized as follows:

(i) Having a vapor pressure equal to or less than 2kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100^{o}F) or;

(ii) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20^{o}C (68^{o}F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months;

(11) Any unit emitting greater than 1 pound per day but less than 5 pounds per day or 1 ton per year of a single HAP:

(i) Trichloroethylene used for smoothing flaw marks on wax molds;

(12) One (1) solvent based wax pattern cleaning operation utilizing Nalco Wax Cleaner or equivalent;

(13) Twelve (12) work benches using trichloroethylene for wax repair;

(14) Twelve (12) heat torches to melt wax;

(15) Twenty-four (24) non-volatiles/non-particulate matter emitting injection molders;
(16) One (1) steam autoclave wax melter;

(17) One water vapor vent exhaust identified as SV-166;

(18) One (1) water blaster.

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]

This permit 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.

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.

(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

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) 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

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

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

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

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

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

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

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and the Northwest Regional Office 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: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

Northwest Regional Office:
Telephone Number: 219-757-0265

(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

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) IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

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

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

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

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

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed 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]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

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

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]

(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

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

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

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

(B) 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.

(2) If IDEM, OAQ upon receiving a timely and complete 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.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
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.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

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

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)]

(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.

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 emissions allowable under 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

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 which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

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

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

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

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

(3) Any change in emissions; and

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

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

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in 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.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

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.

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 [40 CFR 52 Subpart P][326 IAC 6-3-2]

(a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds 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) 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. This condition is not federally enforceable.

C.2 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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).

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

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

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

C.8 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

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

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

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

(g) Indiana 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.9 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

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 source 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.10 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.11 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

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

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

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

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

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a temperature or flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.

(d) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other 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

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

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

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

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

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

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

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

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be 10 days or more until the unit or device will be shut down, then the permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

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

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

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

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

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

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

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

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

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

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

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

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred 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.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

(a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2007and and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calender year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

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

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 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

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

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

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

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) The source 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

(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.

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

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

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

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

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

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) Four (4) electric induction melting furnaces with a total rating of 4,600 pounds metal (steel/brass/copper) per hour:

(1) One (1) 1,460 pound electric induction melting furnaces capable of processing 900 pounds of beryllium containing metal per hour, identified as EU-176 and constructed in July of 1998, controlled for particulate matter by one (1) cyclone, exhausting at one (1) stack identified as SV-157; and

(2) Three (3) 1,460 pound electric induction melting furnaces capable of processing a combined total of 3,700 pounds of non-beryllium containing metal per hour and identified as EU-174, EU-175 and EU-173, constructed in March of 1998, with particulate matter controlled by one (1) cyclone, and exhausting at one (1) stack identified as SV-157.

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

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

D.1.1 Particulate [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2, the particulate emissions from the emission units listed in the table below shall be limited by the following:

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

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

Equipment I.D.	Process Weight Rate (ton/hr)	Allowable Emission Rate (lb/hr)
Induction Furnace (EU-176)	0.45	2.40
Induction Furnace (EU-174, 175, and 173)	1.85	6.19

D.1.2 Prevention of Significant Deterioration [326 IAC 2-2]

(a) This source shall not melt any post-consumer scrap materials in any of the furnaces, identified as EU-173, EU-174, EU-175, and EU-176. Only bars, billets, plate, round, and in-house returns shall be melted in any of the furnaces. The source shall not engage in demagging, refining, or fluxing. Therefore, this source is not considered a secondary metal production facility and is not one of the 28 listed source categories.

(b) PM emissions from the induction furnace, identified as EU-176, exhausting to stack SV-157, shall not exceed 2.40 pounds per hour (equivalent to 10.51 tons per year).

(c) PM emissions from the induction furnaces, identified as EU-174, EU-175, and EU-173, exhausting to stack SV-157, shall not exceed 6.19 pounds per hour (equivalent to 27.11 tons per year).

(d) PM10 emissions from the induction furnaces, identified as EU-176, exhausting to stack SV-157, shall not

exceed 0.068 pounds per hour (equivalent to 0.30 tons per year).

(e) PM10 emissions from the induction furnaces, identified as EU-174, EU-175, and EU-173, exhausting to stack SV-157, shall not exceed 0.167 pounds per hour (equivalent to 0.73 tons per year).

Compliance with these limits shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration, PSD) not applicable.

D.1.3 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR 61, Subpart A]

The provisions of 40 CFR 61 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the induction furnaces, identified as EU-173, except when otherwise specified in 40 CFR 61 Subpart C.

D.1.4 Beryllium [40 CFR 61, Subpart C]

(a) That pursuant to 40 CFR 61, Subpart C (National Emission Standard for Beryllium), beryllium emissions to the atmosphere shall not exceed 10 grams of beryllium over a 24 hour period. This limit applies to the total beryllium emissions from EU-173.

(b) The use of any metals containing beryllium by the furnaces designated as EU-174, EU-175, and EU-176, must be approved by the Office of Air Quality (OAQ) before such change may occur.

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and the control devices.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) No later than five (5) years after January 10, 2001, the Permittee shall perform beryllium testing on furnace EU-173 at the cyclone exhaust stack (SV-157) utilizing methods per 40 CFR Part 61 Appendix B, Method 104. Method 103 of Appendix B to this part is approved by the Administrator as an alternative method. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

(b) No later than five (5) years after January 10, 2001, the Permittee shall perform PM and PM-10 testing on the electric induction furnaces, identified as EU-173, EU-174, EU-175, and EU-176, exhausting to stack SV-157, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.7 Particulate Matter (PM)

In order to comply with Conditions D.1.1 and D.1.2, the cyclones for PM and PM10 control shall be in operation and control emissions from the induction furnaces at all times that the induction furnaces are in operation.

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

D.1.8 Visible Emissions Notations

(a) Visible emission notations of the electric induction melting furnaces stack exhausts (SV-157) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

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

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

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been

trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.1.9 Cyclone Inspections

An inspection shall be performed each calender quarter of all cyclones controlling the induction furnaces when venting to the atmosphere. A cyclone inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months.

D.1.10 Cyclone Failure Detection

In the event that cyclone failure has been observed:

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

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

D.1.11 Record Keeping Requirements

(a) To document compliance with Condition D.1.2(a), the Permittee shall maintain records of all materials melted in each furnace. Records shall include purchase orders and invoices as necessary to verify the composition of input material melted in each furnace. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(b) Pursuant to 40 CFR 61.33(c), to document compliance with Condition D.1.4, the Permittee shall maintain records of emission test results and other data needed to determine total beryllium emissions. Records shall be retained at the source and made available, for inspection upon request.

(c) To document compliance with Condition D.1.8, the Permittee shall maintain records of visible emission notations of the electric induction melting furnaces stack exhausts (SV-157) once per shift.

(d) To document compliance with Condition D.1.9, the Permittee shall maintain records of the results of the inspections required under Condition D.1.9 and the dates the vents are redirected.

(e) To document compliance with Condition D.1.5, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

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

Three (3) shot blasters identified as EU-032, EU-034, and EU-041, three (3) ceramic mold knock out machines identified as EU-038, EU-039, and EU-040, and one (1) sandblaster identified as EU-272 (exhausting to stack SV-158), all constructed in 1979, with a total maximum capacity of processing 0.49 tons of steel per hour, and all controlled for particulate matter by three (3) cyclones identified as CU-056, CU-057, and CU-058 respectively, and one (1) air collection system (fabric filters), identified as D-003, exhausting at one (1) stack identified as SV-157.

(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]

The allowable particulate emission rate from the shotblasting, knock out machines, and sandblasting facilities, all exhausting to stacks SV-157 and SV-158, shall not exceed 2.54 pounds per hour when operating at a process weight rate of 0.49 tons per hour. The pounds per hour limitation 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:

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

D.2.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

The total PM and PM-10 emissions shall each not exceed 2.54 pounds per hour from the Shot Blasters (EU-032, EU-034 and EU-041), the ceramic mold knock out machines (EU-038 through EU-040), and the Sandblaster (EU-272) combined, which exhaust through stacks SV-157 and SV-158. Compliance with these limits shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration, PSD) not applicable.

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and the control devices.

Compliance Determination Requirements

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

Within 180 days after the issuance of this Part 70 permit, the Permittee shall perform PM and PM10 testing of the shotblasting, knock out machines, and sandblasting facilities (Stacks 157 and 158) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

D.2.5 Particulate Matter (PM)

In order to comply with Conditions D.2.1 and D.2.2, the cyclones and air collection system for PM and PM10 control shall be in operation and control emissions from the shotblasting, knock out machines, and sandblasting facilities at all times that the shotblasting, knock out machines, and sandblasting are in operation.

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

D.2.6 Visible Emissions Notations

(a) Visible emission notations of the shotblasting, knock out machines, and sandblasting facilities stack

exhaust (Stacks 157 and 158) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.2.7 Cyclone Inspections

An inspection shall be performed each calender quarter of all cyclones controlling the shotblasting, knock out machines, and sandblasting facilities when venting to the atmosphere. A cyclone inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months.

D.2.8 Cyclone Failure Detection

In the event that cyclone failure has been observed:

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

D.2.9 Parametric Monitoring

The Permittee shall record the total static pressure drop across the air collection system used in conjunction with the shotblasting, knock out machines, and sandblasting facilities, at least once per shift when the shotblasting, knock out machines, and sandblasting facilities are in operation. When for any one reading, the pressure drop across the air collection system is outside the normal range of 0.5 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C-Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and 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.2.10 Air Collection System Inspections

An inspection shall be performed each calendar quarter of the cartridge system controlling the shotblasting, knock out machines, and sandblasting facilities when venting to the atmosphere. An air collection system inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective cartridges shall be replaced.

D.2.11 Broken or Failed Bag Detection

In the event that a bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down 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).

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

D.2.12 Record Keeping Requirements

(a) To document compliance with Condition D.2.6, the Permittee shall maintain records of visible emission notations of the shotblasting, knock out machines, and sandblasting facilities stack exhaust once per shift.

(b) To document compliance with Condition D.2.9, the Permittee shall maintain once per shift records of the total static pressure drop during normal operation when venting to the atmosphere.

(c) To document compliance with Conditions D.2.7 and D.2.10, the Permittee shall maintain records of the results of the inspections required under Conditions D.2.7 and D.2.10 and the dates the vents are redirected.

(d) To document compliance with Condition D.2.5, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(a) Five (5) friction saws identified as EU-033, EU-035, EU-036, EU-037, and EU-133, each with a maximum capacity of processing 0.98 tons of steel per hour, controlled for particulate matter by five (5) dust collectors, which vent internally;

(b) Two (2) silica sand rain fall sanders identified as EU-049 and EU-050, one (1) silica sand rain fall/fluidized bed sander identified as EU-111, and one (1) Zircon mix tank identified as EU-131, all constructed in 1979, with a total maximum capacity of 0.084 tons of sand per hour, and controlled for particulate matter by one (1) cartridge type dust collector identified as MC3000-1, which vents internally;

(c) One (1) fluidized sand bed identified as EU-088, one (1) silica sand rain fall sander identified as EU-107, each constructed in 1979, and one (1) rain fall sander/fluidized bed identified as EU-087, constructed in 2001, with a total maximum capacity of 0.042 tons of sand per hour, controlled for particulate matter by one (1) cartridge type dust collector identified as MC3000-2, which vents internally;

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

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

D.3.1 Particulate [326 IAC 6-3]

The particulate emissions from the emission units listed in the table below shall be limited by the following:

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

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

Equipment I.D.	Process Weight Rate (ton/hr)	Allowable Emission Rate (lb/hr)
Friction Saws (EU-033, EU-035, EU-036, EU-037, and EU-133)	0.98 each	4.04 each
Rainfall sanders (EU-049, EU-050, EU-111), Zircon mix tank (EU-131)	0.084	0.78
Fluidized sand bed (EU-088), rainfall/fluidized bed sander (EU-107), rainfall sander/fluidized bed (EU-087)	0.042	0.49

D.3.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

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

(a) The PM and PM-10 emissions shall each not exceed 4.04 pounds per hour from each of the Friction Saws (EU-033, EU-035, EU-036, EU-037, and EU-133).

(b) The total PM and PM-10 emissions shall each not exceed 0.78 pounds per hour from the Silica Sand Rainfall Units (EU-049 and EU-050), the Silica Rainfall/Fluidized Bed Sander (EU-111), and the Zircon Mix Tank (EU-131) combined.

(c) The total PM and PM-10 emissions shall each not exceed 1.10 pounds per hour from the Fluidized Sand Bed (EU-088), the Rainfall Sander/Fluidized Bed (EU-087) and the Silica Rainfall Sander (EU-107) combined.

Compliance with these limits shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration, PSD) not applicable.

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and the control devices.

Compliance Determination Requirements

D.3.4 Particulate Matter (PM)

In order to comply with Conditions D.3.1 and D.3.2, the dust collectors for PM and PM10 control shall be in operation and control emissions from the friction saws, silica sand rain fall units, silica rainfall sanders, Zircon mix tank, and fluidized sand bed at all times that the friction saws, silica sand rain fall units, silica rainfall sanders, Zircon mix tank, and fluidized sand bed are in operation.

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

D.3.5 Visible Emissions Notations

(a) Visible emission notations of the friction saws, silica sand rain fall units, silica rainfall sanders, Zircon mix tank, and fluidized sand bed stack exhausts (Stacks 015, 016, 017, and 081 through 085) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.3.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the each of the dust collectors used in conjunction with the friction saws, silica sand rain fall units, silica rainfall sanders, Zircon mix tank, and fluidized sand bed, at least once per shift when the friction saws, silica sand rain fall units, silica rainfall sanders, Zircon mix tank, and fluidized sand bed are in operation and venting to the atmosphere. When for any one reading, the pressure drop across any dust collector is outside the normal range of 2.0 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-Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and 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.3.7 Dust Collector Inspections

An inspection shall be performed each calendar quarter of all dust collectors controlling the friction saws, silica sand rain fall units, silica rainfall sanders, Zircon mix tank, and fluidized sand bed when venting to the atmosphere. A dust collector inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective filters shall be replaced.

D.3.8 Broken or Failed Dust Collector Detection

In the event that dust collector failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(b) For single compartment dust collectors, if failure is indicated by a significant drop in the dust collector's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately 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).

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

D.3.9 Record Keeping Requirements

(a) To document compliance with Condition D.3.5, the Permittee shall maintain records of visible emission notations of the friction saws, silica sand rain fall units, silica rainfall sanders, Zircon mix tank, and fluidized sand bed stack exhaust once per shift.

(b) To document compliance with Condition D.3.6, the Permittee shall maintain once per shift records of the total static pressure drop during normal operation when venting to the atmosphere for each dust collector.

(c) To document compliance with Condition D.3.7, the Permittee shall maintain records of the results of the inspections required under Condition D.3.7 and the dates the vents are redirected.

(d) To document compliance with Condition D.3.3, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.4 FACILITY OPERATION CONDITIONS

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

(a) Thirteen (13) natural gas fired ovens, for removing wax from sand molds, each rated at 0.55 million British thermal units (MMBtu) per hour, identified as EU-180 through EU-192, each with a maximum capacity of processing 0.46 tons of sand molds per hour, and each exhausting through individual stacks respectively identified as SV-180 through SV-192;

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

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

D.4.1 Particulate [326 IAC 6-3]

The particulate emissions from the emission units listed in the table below shall be limited by the following:

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

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

Equipment I.D.	Process Weight Rate (ton/hr)	Allowable Emission Rate (lb/hr)
Wax burn-out ovens (EU-180 through EU-192)	0.46 each	2.43 each

D.4.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

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

PM and PM10 emissions shall each not exceed 0.63 pounds per hour from each of the wax burn out ovens (EU-180 through EU192), which exhaust through stacks identified as SV-180 through SV-192, respectively.

Compliance with these limits shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration, PSD) not applicable.

Compliance Determination Requirements

D.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 180 days after the issuance of this Part 70 permit, the Permittee shall perform PM and PM-10 testing on at least two (2) of the wax burn out ovens, identified as EU-180 through EU-192, exhausting to stacks SV-180 through SV-192, respectively, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.

SECTION D.5 FACILITY OPERATION CONDITIONS

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

(a) Two (2) sodium hydroxide solution (caustic) metal parts cleaning units rated at a combined capacity of 4,900 pounds steel castings per hour and identified as EU-001and EU-169, constructed in 1979 and 2005, with a wet scrubber for caustic fume control identified as CU-001 and CU-169, and each exhausting at two (2) stacks identified as SV-168 and SV-169, respectively.

(b) One (1) sandblast cabinet system identified as EU-260, constructed in 1995, with a maximum capacity of 71.0 pounds of aluminum oxide per hour, utilizing one (1) fabric filter cartridge for particulate matter control, and exhausting through stack SV-160, which vents internally;

(c) Three (3) sandblasters identified as EU-285, EU-286 and EU-287, constructed in 1979, and one (1) sandblaster identified as EU-284, constructed in 2000, each with a maximum capacity of 34.0 pounds of aluminum oxide per hour, utilizing one (1) fabric filter cartridge system for particulate matter control, and exhausting through stack SV-175, which vents internally; and

(d) One (1) shot blaster identified as EU-137, constructed in 2001, one (1) 2-inch degater identified as EU-266, one (1) degater machine identified as EU-267, one (1) 4-inch degater machine identified as EU-269, and one (1) two station key polisher, identified as EU270, with a total maximum capacity of processing 0.099 tons of steel per hour, all controlled for particulate matter by an internal micro air collection system (fabric filters), identified as D-002, exhausting at one (1) stack identified as SV-179, which vents internally.

(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.5.1 Particulate [326 IAC 6-3]

The particulate emissions from the emission units listed in the table below shall be limited by the following:

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

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

Equipment I.D.	Process Weight Rate (ton/hr)	Allowable Emission Rate (lb/hr)
Caustic metal parts cleaners (EU-001 and EU-169)	2.45	7.47
Sandblast cabinet (EU-260)	0.050	0.551
Sandblasters (EU-284 - EU-287)	0.116	0.97
Shotblaster, degators and key polisher (EU-137, EU-266, EU-267, EU-269, EU-270)	0.099	0.87

D.5.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

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

(a) PM and PM-10 emissions shall each not exceed 2.75 pounds per hour from the sodium hydroxide solution (caustic) metal parts cleaning unit (EU-001 and EU-169), exhausting at one (1) stack , identified as SV-001.

(b) The total PM and PM10 emissions shall not exceed 0.551 pounds per hour from the sandblast cabinet system, identified as EU-260, and exhausting through stack SV-160.

(c) The total PM and PM10 emissions shall each not exceed 2.20 pounds per hour from the sandblasters (EU-284, EU-285, EU-286 and EU-287), all exhausting at one (1) stack identified as SV-175 combined.

(d) The total PM and PM10 emissions shall each not exceed 0.87 pounds per hour from the shot blaster (EU-137), the 2-inch degater (EU-266), the degater machine (EU-267), the 4-inch degater machine (EU-269), and the two station key polisher, (EU-270) combined, all exhausting at one (1) stack identified as SV-179.

Compliance with these limits shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration, PSD) not applicable.

D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and the control devices.

Compliance Determination Requirement

D.5.4 Particulate Matter (PM)

In order to comply with Conditions D.5.1 and D.5.2, air collection system, and fabric filter cartridges, for particulate control shall be in operation and control emissions from the sandblasting facilities and shotblasting facilities listed in Section D.5 at all times that the facilities are in operation.

SECTION D.6 FACILITY OPERATION CONDITIONS

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

Insignificant degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6:

(1) One (1) Safety Kleen Degreaser, identified as EU-294, using less than 145 gallons per 12 month period; and

(2) One (1) H.D. Degreaser, identified as EU-276, using less than 145 gallons per 12 month period;

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

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

(a) Equip the cleaner with a cover;

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

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

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

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

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

D.6.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

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

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

(B) The solvent is agitated; or

(C) The solvent is heated.

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

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

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

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

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

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

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

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:

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

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

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

SECTION D.7 FACILITY OPERATION CONDITIONS

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

(a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment, venting to one (1) stack SV-178;

(b) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations:

(1) One (1) surface grinder identified as EU-012, utilizing one (1) dust collector for particulate matter control, and exhausting through stack SV-080, which vents internally;

(2) One (1) CNC mill identified as EU-274, with a maximum capacity of 0.23 pounds of carbon per hour, utilizing one (1) fabric filter cartridge for particulate matter control, and exhausting through stack SV-162, which vents internally;

(3) Two (2) EDM mill machines identified as EU-275 and EU-277, constructed in 1998, each with a maximum capacity of 0.06 pounds of carbon per hour, utilizing one (1) fabric filter cartridge for particulate matter control, and exhausting through stack SV-163, which vents internally;

(4) One (1) OKK CNC milling machine identified as EU-292, constructed in 1979, controlled for particulate matter by one (1) fabric filter cartridge, and exhausting at one (1) stack identified as SV-176, which vents internally;

(5) Four (4) surface grinders identified as EU-262 through EU-265, each with a maximum capacity of 0.05 pounds of steel per hour, all utilizing one (1) fabric filter cartridge unit for particulate matter control, and exhausting through stack SV-161, which vents internally.

(c) Seven (7) milling machines, each with a maximum capacity of 0.10 pounds of steel per hour;

(d) One (1) two-head degator, identified as EU-046;

(e) One (1) surface mill machine identified as EU-025;

(f) One (1) 400 pound aluminum melt pot with a maximum capacity of melting 225 pounds of aluminum per hour, identified as aluminum melt pot, exhausting internally;

(g) One (1) abrasive saw, identified as EU-086, constructed in 2001, controlled for particulate matter by one (1) cyclone identified as CU-070, exhausting through one (1) stack identified as SV-062, which vents internally;

(h) Nineteen (19) miscellaneous belt sanders, grinders, saws, and degaters with particulate matter emissions below 5 pounds per hour;

(i) Burr King belt sander (Aero-0275);
(ii) Roboform EDM (Aero-0277);
(iii) SBL EDM (Aero-0701);
(iv) grinder (Aero-0702);
(v) Bador grinder (Aero-0273);
(vi) band saw (Aero-0250);
(vii) Cincinnati grinder (Aero-0445);
(viii) Burr King belt sander (Aero-0463);
(ix) 9-inch degator (Aero-0422);
(x) 9-inch degator (Aero-0422B);
(xi) 8-inch degator (Aero-0423);
(xii) Bur King belt sander (Aero-0539);
(xiii) six station degator (Aero-0424);
(xiv) automatic degator (Aero-0444);
(xv) 6-inch belt sander (Aero-0704);
(xvi) Delta band saw (Aero-0372); and

(xvii) three (3) Burr King belt sanders (Aero-0449, Aero-0376, and Aero-0516); and

(i) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:
one (1) boiler system rated at 3.35 MMBtu per hour, constructed in 1983.

(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.7.1 Particulate [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the aluminum melt pot shall not exceed 0.95 pounds per hour when operating at a process weight rate of 0.11 tons per hour.

The pounds per hour limitation 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:

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

D.7.2 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

(a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds 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) 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. This condition is not federally enforceable.

D.7.3 Particulate Matter (PM) [326 IAC 6-2-3(e)]

Pursuant to 326 IAC 6-2-3(e) (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from the boiler system rated at 3.35 MMBtu per hour shall not exceed 0.6 lb/MMBtu heat input.

D.7.4 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

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

(a) PM and PM10 emissions from the abrasive saw, identified as EU-086, exhausting at one (1) stack identified as SV-060, shall each not exceed 0.55 pounds per hour;

(b) The total PM and PM10 emissions from the surface grinder, identified as EU-012, the CNC mill, identified as EU-274, the EDM mill machines, identified as EU-275 and EU277, the OKK CNC milling machine, identified as EU-292, and the surface grinders, identified as EU-262 - EU-265, shall each not exceed 1.38 pounds per hour.

(c) The total PM and PM10 emissions shall each not exceed 0.63 pounds per hour from the two-head degator (EU-046), surface mill (EU-025), and nineteen (19) miscellaneous belt sanders, grinders, saws and degators combined.

(d) The PM and PM10 emissions shall not exceed 0.21 pounds per hour and 0.20 pounds per hour,

respectively, from the one (1) aluminum melt pot.

Compliance with these limits shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration, PSD) not applicable.

D.7.5 Secondary Aluminum NESHAP [40 CFR 63, Subpart RRR]

The one (1) aluminum melt pot shall only melt clean charge, customer returns, or internal scrap as defined under 40 CFR 63.1503. Therefore, the requirements of 40 CFR 63, Subpart RRR do not apply.

Compliance Determination Requirement

D.7.6 Particulate Matter (PM)

In order to comply with Conditions D.7.1, D.7.2 and D.7.4, the baghouses, air collection systems, filter cartridges, and dust collectors, for particulate control shall be in operation and control emissions from the facilities listed in Section D.7 at all times that the facilities listed in Section D.7 are in operation.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Aero Metals, Inc.
Source Address: 402 Darlington Street, LaPorte, Indiana 46350
Mailing Address: 402 Darlington Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-12683-00074

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)

☐ Report (specify)

☐ Notification (specify)

☐ Affidavit (specify)

☐ Other (specify)

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Aero Metals, Inc.
Source Address: 402 Darlington Street, LaPorte, Indiana 46350
Mailing Address: 402 Darlington Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-12683-00074

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

☐ This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

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

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

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

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

Form Completed by:

Title / Position:

Date:

Phone:

A certification is not required for this report.

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

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Aero Metals, Inc.
Source Address: 402 Darlington Street, LaPorte, Indiana 46350
Mailing Address: 402 Darlington Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-12683-00074

Months: _____ **to** _____ **Year:** _____

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

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation: **Duration of Deviation:**

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation: **Duration of Deviation:**

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

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

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

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

Form Completed By:

Title/Position:

Date:

Phone:

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	AeroMetals, Inc.
Source Location:	402 Darlington Street, LaPorte, Indiana 46350
County:	LaPorte
SIC Code:	3324
Operation Permit No.:	T091-12683-00074
Operation Permit Issuance Date:	December 8, 2003
Minor Source Modification No.:	091-21629-00074
Significant Permit Modification No.:	091-21330-00074
Permit Reviewer:	Adeel Yousuf / EVP

The Office of Air Quality (OAQ) has reviewed a modification application from AeroMetals, Inc., relating to a steel/brass/copper/aluminum investment casting operation.

History

On June 20, 2005, AeroMetals, Inc. submitted an application to the OAQ requesting a permit modification to 1) relocate all the existing emission units from East Plant to the West Plant, 2) re-configure the electric induction melting furnaces, 3) add five (5) new natural gas-fired ovens, with each one rated at 0.55 MMBtu per hour, and 4) add one (1) new sodium hydroxide solution metal parts cleaning unit. AeroMetals, Inc. was issued Part 70 Operating Permit No. T091-12683-00074 on December 8, 2003.

Explanation of Modification

The permit modification will consist of the following:

(a) All of the existing emission units located at Aero East Plant will be relocated to the Aero West Plant consisting of the following:

(i) Electric induction melting furnaces:
As part of this re-location, the existing six (6) electric induction melting furnaces located at Aero East Plant will be re-configured and relocated to Aero West Plant. The total number of electric induction melting furnaces will be reduced to four (4) instead of the original six (6). Originally, there were a total of four (4) furnaces for melting beryllium containing metals, and two (2) furnaces for melting non-beryllium containing metals. However, as part of this re-configuration, there will be only one (1) furnace for melting beryllium containing metal (instead of four (4)) and three (3) furnaces for melting non-beryllium containing metal (instead of two (2)). Of those three (3) furnaces removed from beryllium containing metal melting, one (1) will be moved to melt non-beryllium containing metals and two (2) furnaces will be removed. There is no new construction of these furnaces and there will be no increase in emissions because the total throughput rate of these (4) furnaces will stay the same at 4,600 pounds metal per hour (see emission calculations section for details). Following is the new emission unit description after re-configuration.

(a) ~~Six~~ **Four** (~~6~~**4**) electric induction melting furnaces with a total rating of 4,600 pounds metal (steel/brass/copper) per hour:

(1) ~~Two (2) 750 pound electric induction melting furnaces capable of processing 600 pounds of beryllium containing metal per hour each, identified as EU-007 and EU-008, and constructed in 1979, and~~ ~~two~~ **One** (~~2~~**1**) 1,460 pound electric induction melting furnace~~s~~ capable of processing 900 pounds of beryllium containing metal per hour ~~each~~, identified as EU-~~009~~**176** ~~and EU-010~~ and constructed in July of 1998, ~~all~~ controlled for particulate matter by one (1) cyclone, exhausting at one (1) stack identified as SV-~~007~~**157**; and

(2) ~~Two~~ **Three** (~~2~~**3**) 1,460 pound electric induction melting furnaces capable of processing **a combined total of** ~~800~~ **3,700** pounds of non-beryllium containing metal per hour ~~each~~ and identified as EU-~~058~~**174, EU-175** and EU-~~059~~**173**, constructed in March of 1998, with particulate matter controlled by one (1) cyclone, and exhausting at one (1) stack identified as SV-~~021~~**157**.

(ii) Three (3) shot blasters identified as EU-032, EU-034, and EU-041, three (3) ceramic mold knock out machines identified as EU-038, EU-039, and EU-040, and one (1) sandblaster identified as EU-~~042~~ **272 (exhausting to stack SV-158)**, all constructed in 1979, with a total maximum capacity of processing 0.49 tons of steel per hour, and all controlled for particulate matter by three (3) cyclones identified as CU-056, CU-057, and CU-058 respectively, and one (1) air collection system (fabric filters), identified as D-003, exhausting at one (1) stack identified as SV-~~048~~ **157**;

(iii) Five (5) friction saws identified as EU-234, EU-225, EU-223, EU-222, and EU-221, each with a maximum capacity of processing 0.98 tons of steel per hour, controlled for particulate matter by five (5) dust collectors, which vent internally;

(iv) Two (2) silica sand rain fall sanders identified as EU-049 and EU-050, one (1) silica sand rain fall/ fluidized bed sander identified as EU-111, and one (1) Zircon mix tank identified as EU-131, all constructed in 1979, with a total maximum capacity of 0.084 tons of sand per hour, and controlled for particulate matter by one (1) cartridge type dust collector identified as MC3000-1, which vents internally;

(v) One (1) fluidized sand bed identified as EU-088, one (1) silica sand rain fall sander identified as EU-107, each constructed in 1979, and one (1) rain fall sander/fluidized bed identified as EU-087, constructed in 2001, with a total maximum capacity of 0.042 tons of sand per hour, controlled for particulate matter by one (1) cartridge type dust collector identified as MC3000-2, which vents internally;

(vi) Addition of five (5) more natural gas fired ovens for removing wax from sand molds. These additional ovens are intended to enhance operational flexibility. In addition, each one of the natural gas fired oven qualifies as an insignificant activity with heat input equal to or less than ten million (10,000,000) Btu per hour, as defined in 326 IAC 2-7-1(21). Following is the revised unit description.

(f) ~~Eight~~ Thirteen (~~8~~**13**) natural gas fired ovens, for removing wax from sand molds, each rated at 0.55 million British thermal units (MMBtu) per hour, identified as **EU-180 through EU-192** ~~EU-002, EU-003, EU-004, EU-005, EU-060, EU-061, EU-084, and EU-085~~, each with a maximum capacity of processing 0.46 tons of sand molds per hour, and each exhausting through individual stacks respectively identified as **SV-180 through SV-192** ~~SV-002, SV-003, SV-004, SV-005, SV-022, SV-023, SV-046 and SV-047~~;

(b) Addition of one (1) new caustic metal parts cleaning unit:

(i) The source already operates one (1) sodium hydroxide solution metal parts cleaning unit rated at 4,900 pounds of steel castings per hour, identified as EU-001. The source has requested to add one (1) more similar metal parts cleaning unit. The additional sodium hydroxide solution metal parts cleaning unit is being added to enhance operational flexibility and will operate in tandem with the existing unit under the existing 4,900 pounds per hour overall process weight rate. Both units' operation is restricted by the total amount of metal to be cleaned. The metal to be cleaned can not exceed the permitted maximum overall rate of 4,900 pounds per hour. This melt rate will now be split between the two units to allow for greater flexibility. Following is the revised description of these units.

(g) ~~One~~ Two (~~1~~**2**) sodium hydroxide solution (caustic) metal parts cleaning unit**s** rated at **a combined capacity of** 4900 pounds steel castings per hour and identified as EU-001 **and EU-169**, constructed in 1979 **and 2005,** with a wet scrubber for caustic fume control identified as CU-001 **and CU-169**, and **each** exhausting at one (1) stack identified as SV-~~001~~**168 and SV-169, respectively**.

Existing Approvals

The source was issued a Part 70 Operating Permit (T091-12683-00074) on December 8, 2003. The source has since received the following:

(a) Exemption No. 091-18232, issued on December 31, 2003.

(b) First Administrative Amendment No.: 091-21010, issued on May 4, 2005.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Minor Source Modification and Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on June 20, 2005 and additional information received on July 28, 2005.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, five (5) pages).

Electric induction melting furnaces
As explained above under the Explanation of Modification section, the existing six (6) electric induction furnaces are being reduced to four (4) and relocated to the Aero West Plant. The following table depicts the throughput re-configuration for these furnaces:

	Beryllium Containing Metal	Non-Beryllium Metal	Total
	Existing Configuration		
No. of furnaces	4	2	6
Throughput	3000	1600	4600
	New Configuration		
No. of furnaces	1	3	4
Throughput	900	3700	4600

As it can be seen from the above table, the total throughput of the metal melting operation will stay the same at 4,600 lb/hr. In addition, there is no increase in potential emissions while adjusting the throughput between non beryllium and beryllium metals since the potential emission calculations done for these furnaces in the Part 70 operating permit (T091-12683-00074) were based on the maximum throughput rate of 4,600 pounds per hour and an emission factor of 2.3 tons copper per hour. Emission calculations were also done for both non-beryllium and beryllium containing metals based on the stack test data but the Copper emission factor provided the worst case scenario. The Copper emission factor was taken from USEPA AP-42 (5^{th} Edition factors for SCC #3-04-002-23). Therefore, there is no increase in potential emissions due to this re-configuration of the melt furnaces.

Potential To Emit Before Controls (Modification)

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source 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."

Pollutant	Potential To Emit (tons/year)
PM	12.07
PM-10	12.14
SO_2	0.01
VOC	0.07
CO	1.01
NO_x	1.20

Justification for Modification

The Title V permit is being modified through a Minor Source Modification and Significant Permit Modification. The minor source modification is being performed pursuant to 326 IAC 2-7-10.5(d)(4) because it is a modification which has the potential to emit less than twenty-five (25) tons per year, but greater than five (5) tons per year of PM and PM10. The significant permit modification is being performed pursuant to 326 IAC 2-7-12(d)(1) for a request that does not qualify as a minor permit modification or administrative amendment, and is considered as a significant change to existing permit terms and conditions, including emission limits.

County Attainment Status

The source is located in LaPorte County.

Pollutant	Status
PM-10	Attainment
PM-2.5	Attainment
SO_2	Attainment
NO_2	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Non-attainment
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. LaPorte County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for nonattainment new source review.

(b) LaPorte County has been classified as attainment for PM2.5. 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 PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability for the source section.

(c) LaPorte County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

(d) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects calendar year 2003 emissions, based upon the Indiana Air Emission Summary Data for criteria pollutants.

Pollutant	Emissions (ton/yr)
PM	n.d.
PM2.5	0
PM_{10}	0
SO_2	0
VOC	0
CO	1.0
NO_x	1.0

Note: n.d. means no data available.

Existing Source Status

Existing Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

	PM (tons/yr)	PM_{10} (tons/yr)	SO_2 (tons/yr)	NO_X (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Worst Case Single HAP (tons/yr)	Comb. HAPs (tons/yr)
Source	210.19	182.88	1.28	8.90	9.83	6.78	0.8	1.60

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

(b) These emissions are based upon the information provided by the source for this modification.

Potential to Emit After Controls for the Modification

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units for the modification.

	Potential to Emit (tons/year)							
Process/facility	PM	PM_{10}	SO_2	NO_X	VOC	CO	HAPs	
							Single Worst Case	Total
Caustic Metal Parts Cleaners (EU001 & EU169)	12.05*	12.05*	0.00	0.00	0.00	0.00	0.00	0.00
NG fired ovens (EU-188 through EU-192)	0.02	0.09	0.01	1.20	0.07	1.01	negl.	negl.
Electric Induction Furnaces (~~EU-007, EU-008, EU-009, and EU-110~~ **EU-176**)	~~47.39~~ **10.51****	~~33.57~~ **1.94****	0.00	0.00	0.00	0.00	0.004	0.004
Electric Induction Furnaces (~~EU-058 and EU-059~~ **EU-174, EU-175, and EU-173**)	~~29.08~~ **27.11****	~~22.38~~ **7.98****	0.00	0.00	0.00	0.00	0.80	0.80
Total for the Modification	0.02	0.09	0.01	1.20	0.07	1.01	negl.	negl.
Existing Source Emissions	~~249.02~~ **210.17**	~~228.82~~ **182.79**	1.27	7.70	9.76	5.77	0.8	1.60
Total for the Entire Source After Modification	210.19	182.88	1.28	8.90	9.83	6.78	0.8	1.60
PSD Major Source Levels	250	250	250	250	250	250	-	-

***** PM and PM10 emissions reflect the controlled potential to emit for the two (2) caustic metal parts cleaning units (EU001 is existing and EU169 is a new unit being added in this modification). These units will operate in tandem under the original permitted process weight rate of 4,900 pounds per hour. This maximum process weight rate will be shared between the two cleaning machines. There is no increase in controlled potential emissions since the allowable emissions from the existing cleaning unit (EU001), already permitted in the original Part 70 permit (091-12683-00074), were 12.05 tons per year based on the process weight rate of 4900 lbs/hr which will now be shared between the two units.
****** PM emissions for the electric induction furnaces (EU-173, 174, 175, and 176) are based on 326 IAC 6-3-2 calculated allowable. While the PM10 emissions represent the controlled potential emissions.

This existing source is still a minor PSD stationary source after this modification because no criteria pollutants are emitted at a rate greater than 250 tons per year.

Federal Rule Applicability

(a) The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this modification. Such requirements apply to a pollutant-specific emissions unit (PSEU), as defined in 40 CFR 64.1, at a major source that is required to obtain a Part 70 or 71 permit if the PSEU meets the following criteria:

(1) the unit is subject to an emission limitation or standard for an applicable regulated air pollutant,

(2) the unit uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard, and

(3) the unit has a potential to emit (PTE) before controls equal to or greater than 100 percent of the amount (tons per year) of the pollutant required for a source to classified as a Part 70 major source.

This source was issued Part 70 Permit No. T091-12683-00074 on December 8, 2003. For this modification, no unit has potential pre-control emissions of a regulated air pollutant that are equal to or greater than 100 tons per year. Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this modification.

(b) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) included in the modification to this source.

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 61, and 326 IAC 20 and 40 CFR Part 63) included in the modification to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is not subject to the requirements of 326 IAC 2-2 because it is not one of the 28 listed source categories and the potential to emit of all regulated pollutants, after controls, are less than 250 tons per year. The following PSD limits are being revised which were in the original Title V permit (T091-12683-00074), issued on December 8, 2003, as a result of this modification:

(a) PM emissions from the induction furnace~~s~~, identified as ~~EU-007 - EU-010~~ **EU-176**, exhausting to stack SV-~~007~~**157**, shall not exceed ~~8.46~~ **2.40** pounds per hour **(equivalent to 10.51 tons per year).**

(b) PM emissions from the induction furnaces, identified as ~~EU-058 and EU-059~~ **EU-174, EU-175, and EU-173**, exhausting to stack SV-~~021~~**157**, shall not exceed ~~4.44~~ **6.19** pounds per hour **(equivalent to 27.11 tons per year).**

(c) PM10 emissions from the induction furnace~~s~~, identified as ~~EU-007 - EU-010~~ **EU-176**, exhausting to stack SV-~~007~~**157**, shall not exceed ~~7.66~~ **0.068** pounds per hour **(equivalent to 0.30 tons per year).**

(d) PM10 emissions from the induction furnaces, identified as ~~EU-058 and EU-059~~ **EU-174, EU-175, and EU-173**, exhausting to stack SV-~~021~~**157**, shall not exceed ~~5.11~~ **0.167** pounds per hour **(equivalent to 0.73 tons per year).**

Note that the combined PM allowable for the induction melting furnaces is lower than the original allowable value. Similarly, the combined PM10 allowable for the induction melting furnaces is lower than the previously allowable value and reflects the controlled potential to emit. This source remains a minor PSD source after this modification. Additionally, PM emission limits are based on 326 IAC 6-3-2 allowable limits and PM10 emission limits are based on controlled potential emissions. Compliance with these limits shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration, PSD) not applicable.

326 IAC 2-6 (Emission Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2007 and every 3 years after. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

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

(a) Opacity shall not exceed an average of forty percent (40%) 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.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New Source Toxics Control)

326 IAC 2-4.1-1 applies to new or reconstructed facilities with potential emissions of any single HAP equal or greater than ten (10) tons per twelve (12) month period and potential emissions of a combination of HAPs greater than or equal to twenty-five (25) tons per twelve (12) month period. This modification is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control) because the potential to emit of single HAP and total HAPs is less than 10 and 25 tons per year, respectively.

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) the particulate shall be limited by the following:

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

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

The following allowable limits in the original Title V permit (T091-12683-00074) have been revised as follows:

Equipment I.D.	Process Weight Rate (ton/hr)	Allowable Emission Rate (lb/hr)
Induction Furnace (EU-~~007~~**176**)	~~0.300~~ **0.45**	~~8.46~~ **2.40**
~~Induction Furnace (EU-008)~~	~~0.300~~	
~~Induction Furnace (EU-009)~~	~~0.450~~	
~~Induction Furnace (EU-010)~~	~~0.450~~	
Induction Furnace (EU-~~058~~ **174, 175, and 173**)	~~0.400~~ **1.85**	~~4.44~~ **6.19**
~~Induction Furnace (EU-059)~~	~~0.400~~	

Particulate emissions shall be in compliance with 326 IAC 6-3-2 by controlling particulate emissions with a cyclone exhausting through stack SV-157.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less 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 requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also 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.

There are no new compliance monitoring requirements applicable to the emission units being modified in this modification.

Changes Proposed

The changes listed below have been made to the Part 70 Operating Permit (T091-12683-00074).

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

~~This stationary steel/brass/copper/aluminum investment casting operation consists of two (2) plants:~~

~~(a) Aero East is located at 402 Darlington Street, LaPorte, Indiana; and~~

~~(b) Aero West is located at 1201 East Lincolnway, LaPorte, Indiana.~~

~~Since the two (2) plants are located on contiguous properties, belong to the same industrial grouping, and under common control of the same entity, they will be considered one (1) source, effective from the date of issuance of the FESOP Permit Revision, 091-11381-00120, issued on May 12, 2000.~~

A.~~3~~**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:

~~Aero East~~:

(a) ~~Six~~ **Four** (~~6~~**4**) electric induction melting furnaces with a total rating of 4,600 pounds metal (steel/brass/copper) per hour:

(1) ~~Two (2) 750 pound electric induction melting furnaces capable of processing 600 pounds of beryllium containing metal per hour each, identified as EU-007 and EU-008, and constructed in 1979, and two~~ **One** (~~2~~**1**) 1,460 pound electric induction melting furnace~~s~~ capable of processing 900 pounds of beryllium containing metal per hour ~~each~~, identified as EU-~~009~~**176** ~~and EU-010~~ and constructed in July of 1998, ~~all~~ controlled for particulate matter by one (1) cyclone, exhausting at one (1) stack identified as SV-~~007~~**157**; and

(2) ~~Two~~ **Three** (~~2~~**3**) 1,460 pound electric induction melting furnaces capable of processing **a combined total of** ~~800~~ **3,700** pounds of non-beryllium containing metal per hour ~~each~~ and identified as EU-~~058~~**174, EU-175** and EU-~~059~~**173**, constructed in March of 1998, with particulate matter controlled by one (1) cyclone, and exhausting at one (1) stack identified as SV-~~021~~**157**.

(b) Three (3) shot blasters identified as EU-032, EU-034, and EU-041, three (3) ceramic mold knock out machines identified as EU-038, EU-039, and EU-040, and one (1) sandblaster identified as EU-~~042~~ **272 (exhausting to stack SV-158)**, all constructed in 1979, with a total maximum capacity of processing 0.49 tons of steel per hour, and all controlled for particulate matter by three (3) cyclones identified as CU-056, CU-057, and CU-058 respectively, and one (1) air collection system (fabric filters), identified as D-003, exhausting at one (1) stack identified as SV-~~048~~ **157**;

(c) Five (5) friction saws identified as EU-033, EU-035, EU-036, EU-037, and EU-133, each with a maximum capacity of processing 0.98 tons of steel per hour, controlled for particulate matter by five (5) dust collectors, which vent internally;

(d) Two (2) silica sand rain fall sanders identified as EU-049 and EU-050, one (1) silica sand rain fall/ fluidized bed sander identified as EU-111, and one (1) Zircon mix tank identified as EU-131, all constructed in 1979, with a total maximum capacity of 0.084 tons of sand per hour, and controlled for particulate matter by one (1) cartridge type dust collector identified as MC3000-1, which vents internally;

(e) One (1) fluidized sand bed identified as EU-088, one (1) silica sand rain fall sander identified as EU-107, each constructed in 1979, and one (1) rain fall sander/fluidized bed identified as EU-087, constructed in 2001, with a total maximum capacity of 0.042 tons of sand per hour, controlled for particulate matter by one (1) cartridge type dust collector identified as MC3000-2, which vents internally;

(f) ~~Eight~~ Thirteen (~~8~~**13**) natural gas fired ovens, for removing wax from sand molds, each rated at 0.55 million British thermal units (MMBtu) per hour, identified as **EU-180 through EU-192** ~~EU-002, EU-003, EU-004, EU-005, EU-060, EU-061, EU-084, and EU-085~~, each with a maximum capacity of processing 0.46 tons of sand molds per hour, and each exhausting through individual stacks respectively identified as **SV-180 through SV-192** ~~SV-002, SV-003, SV-004, SV-005, SV-022, SV-023, SV-046 and SV-047~~;

(g) ~~One~~ Two (~~1~~**2**) sodium hydroxide solution (caustic) metal parts cleaning unit**s** rated at **a combined capacity of** 4900 pounds steel castings per hour and identified as EU-001 **and EU-169**, constructed in 1979 **and 2005,** with a wet scrubber for caustic fume control identified as CU-001 **and CU-169**, and **each** exhausting at one (1) stack identified as SV-~~001~~**168 and SV-169, respectively**.

~~Aero West:~~

(~~a~~**h**) One (1) sandblast cabinet system identified as EU-260, constructed in 1995, with a maximum capacity of 71.0 pounds of aluminum oxide per hour, utilizing one (1) fabric filter cartridge for particulate matter control, and exhausting through stack SV-160, which vents internally;

(~~b~~**i**) Three (3) sandblasters identified as EU-285, EU-286 and EU-287, constructed in 1979, and one (1) sandblaster identified as EU-284, constructed in 2000, each with a maximum capacity of 34.0 pounds of aluminum oxide per hour, utilizing one (1) fabric filter cartridge system for particulate matter control, and exhausting through stack SV-175, which vents internally; and

(~~c~~**j**) One (1) shot blaster identified as EU-137, constructed in 2001, one (1) 2-inch degater identified as EU-266, one (1) degater machine identified as EU-267, one (1) 4-inch degater machine identified as EU-269, and one (1) two station key polisher, identified as EU270, with a total maximum capacity of processing 0.099 tons of steel per hour, all controlled for particulate matter by an internal micro air collection system (fabric filters), identified as D-002, exhausting at one (1) stack identified as SV-179, which vents internally;

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) ~~Six~~ **Four** (~~6~~**4**) electric induction melting furnaces with a total rating of 4,600 pounds metal (steel/brass/copper) per hour:

(1) ~~Two (2) 750 pound electric induction melting furnaces capable of processing 600 pounds of beryllium containing metal per hour each, identified as EU-007 and EU-008, and constructed in 1979, and two~~ **One** (~~2~~**1**) 1,460 pound electric induction melting furnace~~s~~ capable of processing 900 pounds of beryllium containing metal per hour each, identified as EU-~~009~~**176** ~~and EU-010~~ and constructed in July of 1998, ~~all~~ controlled for particulate matter by one (1) cyclone, exhausting at one (1) stack identified as SV-~~007~~**157**; and

(2) ~~Two~~ **Three** (~~2~~**3**) 1,460 pound electric induction melting furnaces capable of processing **a combined total of** ~~800~~ **3700** pounds of non-beryllium containing metal per hour ~~each~~ and identified as EU-~~058~~**174, EU-175** and EU-~~059~~**173**, constructed in March of 1998, with particulate matter controlled by one (1) cyclone, and exhausting at one (1) stack identified as SV-~~021~~**157**.

(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 6-3]

Pursuant to 326 IAC 6-3-2, the particulate emissions from the emission units listed in the table below shall be limited by the following:

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

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

Equipment I.D.	Process Weight Rate (ton/hr)	Allowable Emission Rate (lb/hr)
Induction Furnace (EU-~~007~~**176**)	~~0.300~~ **0.45**	~~8.46~~ **2.40**
~~Induction Furnace (EU-008)~~	~~0.300~~	
~~Induction Furnace (EU-009)~~	~~0.450~~	
~~Induction Furnace (EU-010)~~	~~0.450~~	
Induction Furnace (EU-~~058~~ **174, 175, and 173**)	~~0.400~~ **1.85**	~~4.44~~ **6.19**
~~Induction Furnace (EU-059)~~	~~0.400~~	

D.1.2 Prevention of Significant Deterioration [326 IAC 2-2]

(a) This source shall not melt any post-consumer scrap materials in any of the furnaces, identified as ~~EU-007 through EU-010, EU058 and EU059~~ **EU-173, EU-174, EU-175, and EU-176**. Only bars, billets, plate, round, and in-house returns shall be melted in any of the furnaces. The source shall not engage in demagging, refining, or fluxing. Therefore, this source is not considered a secondary metal production facility and is not one of the 28 listed source categories.

(b) PM emissions from the induction furnace~~s~~, identified as ~~EU-007 - EU-010~~ **EU-176**, exhausting to stack SV-~~007~~**157**, shall not exceed ~~8.46~~ **2.40** pounds per hour **(equivalent to 10.51 tons per year)**.

(c) PM emissions from the induction furnaces, identified as ~~EU-058 and EU-059~~ **EU-174, EU-175, and EU-173**, exhausting to stack SV-~~021~~**157**, shall not exceed ~~4.44~~ **6.19** pounds per hour **(equivalent to 27.11 tons per year)**.

(d) PM10 emissions from the induction furnace~~s~~, identified as ~~EU-007 - EU-010~~ **EU-176**, exhausting to stack SV-~~007~~**157**, shall not exceed ~~7.66~~ **0.068** pounds per hour **(equivalent to 0.30 tons per year).**

(e) PM10 emissions from the induction furnaces, identified as ~~EU-058 and EU-059~~ **EU-174, EU-175, and EU-173**, exhausting to stack SV-~~021~~**157**, shall not exceed ~~5.11~~ **0.167** pounds per hour **(equivalent to 0.73 tons per year).**

Compliance with these limits shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration, PSD) not applicable.

D.1.3 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR 61, Subpart A]

The provisions of 40 CFR 61 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the induction furnace~~s~~, identified as ~~EU-007, EU-008, EU-009 and~~ EU-~~010~~**173**, except when otherwise specified in 40 CFR 61 Subpart C.

D.1.4 Beryllium [40 CFR 61, Subpart C]

(a) That pursuant to 40 CFR 61, Subpart C (National Emission Standard for Beryllium), beryllium emissions to the atmosphere shall not exceed 10 grams of beryllium over a 24 hour period. This limit applies to the total beryllium emissions from ~~EU-007, EU-008, EU-009 and~~ EU-~~010~~**173** ~~combined~~.

(b) The use of any metals containing beryllium by the furnaces designated as ~~EU-058 and EU-059~~ **EU-174, EU-175, and EU-176**, must be approved by the Office of Air Quality (OAQ) before such change may occur.

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) No later than five (5) years after January 10, 2001, the Permittee shall perform beryllium testing on furnace~~s~~ ~~EU7-EU10~~ **EU-173** at the cyclone exhaust stack (~~S/V7~~**SV-157**) utilizing methods per 40 CFR Part 61 Appendix B, Method 104. Method 103 of Appendix B to this part is approved by the Administrator as an alternative method. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

(b) No later than five (5) years after January 10, 2001, the Permittee shall perform PM and PM-10 testing on the electric induction furnaces, identified as ~~EU-007 through EU-010~~ **EU-173, EU-174, EU-175, and EU-176,** exhausting to stack SV-~~007~~**157**, ~~and EU-058 and EU-059, exhausting to stack SV-021,~~ utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.8 Visible Emissions Notations

(a) Visible emission notations of the electric induction melting furnaces stack exhaust~~s~~ (SV-~~007~~**157** ~~and SV-021~~) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

****

D.1.11 Record Keeping Requirements

****

(c) To document compliance with Condition D.1.8, the Permittee shall maintain records of visible emission notations of the electric induction melting furnaces stack exhaust~~s~~ (SV-~~007~~**157** ~~and SV-021~~) once per shift.

SECTION D.2 FACILITY OPERATION CONDITIONS

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

Three (3) shot blasters identified as EU-032, EU-034, and EU-041, three (3) ceramic mold knock out machines identified as EU-038, EU-039, and EU-040, and one (1) sandblaster identified as EU-~~042~~ **272 (exhausting to stack SV-158)**, all constructed in 1979, with a total maximum capacity of processing 0.49 tons of steel per hour, and all controlled for particulate matter by three (3) cyclones identified as CU-056, CU-057, and CU-058 respectively, and one (1) air collection system (fabric filters), identified as D-003, exhausting at one (1) stack identified as SV-~~048~~ **157**;

(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]

The allowable particulate emission rate from the shotblasting, knock out machines, and sandblasting facilities, all exhausting to stack**s** SV-~~048~~**157 and SV-158**, shall not exceed 2.54 pounds per hour when operating at a process weight rate of 0.49 tons per hour. The pounds per hour limitation 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:

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

D.2.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

The total PM and PM-10 emissions shall each not exceed 2.54 pounds per hour from the Shot Blasters (EU-032, EU-034 and EU-041), the ceramic mold knock out machines (EU-038 through EU-040), and the Sandblaster (EU-~~042~~**272**) combined, which exhaust through stack**s** SV-~~048~~**157 and SV-158**. Compliance with these limits shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration, PSD) not applicable.

Compliance Determination Requirements

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

Within 180 days after the issuance of this Part 70 permit, the Permittee shall perform PM and PM10 testing of the shotblasting, knock out machines, and sandblasting facilities (Stack**s** ~~048~~**157 and 158**) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. 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.2.6 Visible Emissions Notations

(a) Visible emission notations of the shotblasting, knock out machines, and sandblasting facilities stack exhaust**s** (Stack**s** ~~048~~**157 and 158**) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

SECTION D.4 FACILITY OPERATION CONDITIONS

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

(a) ~~Eight~~ Thirteen (~~8~~**13**) natural gas fired ovens, for removing wax from sand molds, each rated at 0.55 million British thermal units (MMBtu) per hour, identified as **EU-180 through EU-192** ~~EU-002, EU-003, EU-004, EU-005, EU-060, EU-061, EU-084, and EU-085~~, each with a maximum capacity of processing 0.46 tons of sand molds per hour, and each exhausting through individual stacks respectively identified as **SV-180 through SV-192** ~~SV-002, SV-003, SV-004, SV-005, SV-022, SV-023, SV-046 and SV-047~~;

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

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

D.4.1 Particulate [326 IAC 6-3]

The particulate emissions from the emission units listed in the table below shall be limited by the following:

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

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

Equipment I.D.	Process Weight Rate (ton/hr)	Allowable Emission Rate (lb/hr)
Wax burn-out ovens (~~EU-002 - EU-005, EU-060, EU-061, EU-084 and EU-085~~ **EU-180 through EU-192**)	0.46 each	2.43 each

D.4.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

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

PM and PM10 emissions shall each not exceed 0.63 pounds per hour from each of the wax burn out ovens (~~EU-002, EU-003, EU-004, EU-005, EU-060, EU-061, EU-084, and EU-085~~ **EU-180 through EU-192**), which exhaust through stacks identified as ~~SV-002, SV-003, SV-004, SV-005, SV-022, SV-023, SV-046 and SV-047~~ **SV-180 through SV-192**, respectively.

Compliance with these limits shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration, PSD) not applicable.

Compliance Determination Requirements

D.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 180 days after the issuance of this Part 70 permit, the Permittee shall perform PM and PM-10 testing on at least two (2) of the wax burn out ovens, identified as ~~EU-002 through EU-005, EU-060, EU061, EU-084 and EU085~~ **EU-180 through EU-192**, exhausting to stacks ~~SV-002 through SV-005, SV-022, SV-023, SV-046 and SV-047~~ **SV-180 through SV-192**, respectively, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.

SECTION D.5 FACILITY OPERATION CONDITIONS

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

(a) ~~One~~ Two (~~1~~**2**) sodium hydroxide solution (caustic) metal parts cleaning unit**s** rated at **a combined capacity of** 4900 pounds steel castings per hour and identified as EU-001 **and EU-169**, constructed in 1979 **and 2005,** with a wet scrubber for caustic fume control identified as CU-001 **and CU-169**, and **each** exhausting at ~~one~~ **two** (~~1~~**2**) stack**s** identified as SV-~~001~~**168 and SV-169, respectively**.

(b) One (1) sandblast cabinet system identified as EU-260, constructed in 1995, with a maximum capacity of 71.0 pounds of aluminum oxide per hour, utilizing one (1) fabric filter cartridge for particulate matter control, and exhausting through stack SV-160, which vents internally;

(c) Three (3) sandblasters identified as EU-285, EU-286 and EU-287, constructed in 1979, and one (1) sandblaster identified as EU-284, constructed in 2000, each with a maximum capacity of 34.0 pounds of aluminum oxide per hour, utilizing one (1) fabric filter cartridge system for particulate matter control, and exhausting through stack SV-175, which vents internally; and

(d) One (1) shot blaster identified as EU-137, constructed in 2001, one (1) 2-inch degater identified as EU-266, one (1) degater machine identified as EU-267, one (1) 4-inch degater machine identified as EU-269, and one (1) two station key polisher, identified as EU270, with a total maximum capacity of processing 0.099 tons of steel per hour, all controlled for particulate matter by an internal micro air collection system (fabric filters), identified as D-002, exhausting at one (1) stack identified as SV-179, which vents internally.

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

D.5.1 Particulate [326 IAC 6-3]

The particulate emissions from the emission units listed in the table below shall be limited by the following:

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

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

Equipment I.D.	Process Weight Rate (ton/hr)	Allowable Emission Rate (lb/hr)
Caustic metal parts cleaner**s** (EU-001 **and EU-169**)	2.45	7.47
Sandblast cabinet (EU-260)	0.050	0.551
Sandblasters (EU-284 - EU-287)	0.116	0.97
Shotblaster, degators and key polisher (EU-137, EU-266, EU-267, EU-269, EU-270)	0.099	0.87

D.5.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

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

(a) PM and PM-10 emissions shall each not exceed 2.75 pounds per hour from the sodium hydroxide solution (caustic) metal parts cleaning unit**s** (EU-001 **and EU-169**), exhausting at ~~one~~ **two** (~~1~~**2**) stack**s** , identified as SV-~~001~~**168 and SV-169, respectively**.

Additional Change

In accordance with the credible evidence rule (62 Fed. Reg. 8314, Feb 24, 1997); Section 113(a) of the Clean Air Act, 42 U.S. C. § 7413 (a); and a letter from the United States Environmental Protection Agency (USEPA) to IDEM, OAQ dated May 18, 2004, all permits must address the use of credible evidence; otherwise, USEPA will object to the permits. The following language will be incorporated into the permit to address credible evidence:

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.

Conclusion

The modification to the operation of steel/brass/copper/aluminum investment casting shall be subject to the conditions of the attached proposed Minor Source Modification No. 091-21629-00074 and Significant Permit Modification No. 091-21330-00074.

Appendix A: Emission Calculations

Company Name: AeroMetals, Inc.
Address City IN Zip: 402 Darlington Street, LaPorte, Indiana 46350
MSM No.: 091-21629-00074
SPM No.: 091-21330-00074
Reviewer: Adeel Yousuf / EVP
Date: July 20, 2004

Uncontrolled Potential Emissions (tons/year)

	Emissions Generating Activity		
Pollutant	Natural Gas Combustion	Caustic Metal Parts Cleaner	**TOTAL**
PM	0.02	12.05	12.07
PM10	0.09	12.05	12.14
SO2	0.01	0.00	0.01
NOx	1.20	0.00	1.20
VOC	0.07	0.00	0.07
CO	1.01	0.00	1.01
total HAPs	negl.	0.00	0.00
worst case single HAP	negl.	0.00	0.00

Total emissions based on rated capacity at 8,760 hours/year.

Controlled Potential Emissions (tons/year)

	Emissions Generating Activity		
Pollutant	Natural Gas Combustion	Caustic Metal Parts Cleaner	**TOTAL**
PM	0.02	0.48	0.50
PM10	0.09	0.48	0.57
SO2	0.01	0.00	0.01
NOx	1.20	0.00	1.20
VOC	0.07	0.00	0.07
CO	1.01	0.00	1.01
total HAPs	negl.	0.00	0.00
worst case single HAP	negl.	0.00	0.00
Total emissions based on rated capacity at 8,760 hours/year.			

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: AeroMetals, Inc.
Address City IN Zip: 402 Darlington Street, LaPorte, Indiana 46350
MSM No.: 091-21629-00074
SPM No.: 091-21330-00074
Reviewer: Adeel Yousuf / EVP
Date: July 20, 2004

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
2.8	24.1

Five (5) natural gas fired ovens with each one rated at 0.55 MMBtu per hour.

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.02	0.09	0.01	1.20	0.07	1.01

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM Btu/hr 0.3 - < 100

HAPs Emissions

Company Name: AeroMetals, Inc.
Address City IN Zip: 402 Darlington Street, LaPorte, Indiana 46350
MSM No.: 091-21629-00074
SPM No.: 091-21330-00074
Reviewer: Adeel Yousuf / EVP
Date: July 20, 2004

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.529E-05	1.445E-05	9.034E-04	2.168E-02	4.095E-05

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	6.023E-06	1.325E-05	1.686E-05	4.577E-06	2.529E-05

Methodology is the same as page 16.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Process Particulate Emissions
Caustic Metal Parts Cleaner
Company Name: AeroMetals, Inc.
Address City IN Zip: 402 Darlington Street, LaPorte, Indiana 46350
MSM No.: 091-21629-00074
SPM No.: 091-21330-00074
Reviewer: Adeel Yousuf / EVP
Date: July 20, 2004

Uncontrolled Potential Emissions (tons/year)

C. Scrubbers								
Emission Unit ID		Stack ID	No. of Units	Grain Loading per Actual Standard Cubic Foot of Outlet Air	Flow Rate (gpm)	Liquid to Air Ratio (gpm/1,000 acfm)	Control Efficiency	Total (tons/yr)
EU-169*	caustic metal parts cleaner	SV-001	1	0.00430	2.0	0.7	96.00%	12.05
Total							Total:	**12.05**

Controlled Potential Emissions (tons/year)

C. Scrubbers								
Emission Unit ID		Stack ID	No. of Units	Grain Loading per Actual Standard Cubic Foot of Outlet Air	Flow Rate (gpm)	Liquid to Air Ratio (gpm/1,000 acfm)	Control Efficiency	Total (tons/yr)
EU-169*	caustic metal parts cleaner	SV-001	1	0.00430	2.0	0.7	96.00%	0.48
Total							Total:	**0.48**

Total Emissions Based on Rated Capacity at 8,760 Hours/Year

* caustic metal scrubber emissions are based on 1995 stack test results which show the maximum grain loading to be 0.0043 grains/ac

Methodology:
Uncontrolled Potential:
Scrubber (tons/yr) = No. Units * Loading (grains/acf) * Flow Rate (gpm) * 1/Liquid ro Air Ratio (gpm/1,000 acfm) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs * 1/(1-Control Efficiency
Controlled Potential:
Scrubber (tons/yr) = No. Units * Loading (grains/acf) * Flow Rate (gpm) * 1/Liquid ro Air Ratio (gpm/1,000 acfm) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lb

Appendix A: Addendum to Emission Calculations

Company Name: AeroMetals, Inc.
Address City IN Zip: 402 Darlington Street, LaPorte, Indiana 46350
MSM No.: 091-21629-00074
SPM No.: 091-21330-00074
Reviewer: Adeel Yousuf / EVP
Date: August 20, 2005

Stack Test Results:

The stack test was conducted in January 21 and had following results:

SV 007: *0.39 lb/hr PM @ 0.453 tons per hour (Controlled)*
0.07 lb/hr PM10 @ 0.453 tons per hour (Controlled)

Equivalent Emission Facotr for PM in lb/ton = $\frac{0.39}{0.453}$ = **0.86** **lb/ton**

Equivalent Emission Facotr for PM10 in lb/ton = $\frac{0.07}{0.453}$ = **0.15** **lb/ton**

SV 021: *0.19 lb/hr PM @ 0.225 tons per hour (Controlled)*
0.02 lb/hr PM10 @ 0.225 tons per hour (Controlled)

Equivalent Emission Facotr for PM in lb/ton = $\frac{0.19}{0.225}$ = **0.84** **lb/ton**

Equivalent Emission Facotr for PM10 in lb/ton = $\frac{0.02}{0.225}$ = **0.09** **lb/ton**

Emission Calculations

EU-176 @ 0.45 tons per hour

Controlled Emissions:

PM =	0.45 ton/hr x 0.86 lb/ton =	0.387	lb/hr	=	**1.70**	**ton/yr**
PM10 =	0.45 ton/hr x 0.15 lb/ton =	0.0675	lb/hr	=	**0.30**	**ton/yr**

Uncontrolled Emissions (@ 50% control efficiency) = **3.39** **ton/yr**
0.59 **ton/yr**

EU-173, 174, and 175 @ 1.85 tons per hour

Controlled Emissions:

PM =	1.85 ton/hr x 0.84 lb/ton =	1.554	lb/hr	=	**6.81**	**ton/yr**
PM10 =	1.85 ton/hr x 0.09 lb/ton =	0.1665	lb/hr	=	**0.73**	**ton/yr**

Uncontrolled Emissions (@ 50% control efficiency) = **13.61** **ton/yr**
1.46 **ton/yr**