INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: February 16, 2007

RE: Aero Metals Inc. / 091-23254-00074

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, 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 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, 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.dot 03/23/06

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

Mr. Ronald A. Gigliotti, Environmental Manager
Aero Metals, Inc.
402 Darlington Street
La Porte , IN 46350

February 16, 2007

Re: 091-23254-00074
Significant Source Modification to:
Part 70 permit No.: T091-12683-00074

Dear Mr. Gigliotti:

Aero Metals, Inc. was issued Part 70 Operating Permit T091-12683-00074 on December 8, 2003 for operating a steel/brass/copper/aluminum investment casting operation. An application to modify the source was received on June 21, 2006. Pursuant to 326 IAC 2-7-10.5(f)(4)(A), the following emission units are approved for construction and modification at the source:

(a) Five (5) electric induction melting units and their connected melt pots with a total rated capacity of 4,600 pounds metal (steel/brass/copper/aluminum) per hour:

(1) Three (3) 350 KW electric induction melting units capable of processing non-beryllium containing alloy. The melt pots [two (2) per melter], with a maximum combined rating of 3,000 pounds per hour, are identified as EU-173, EU-174, EU-175, EU-176, EU-177 and EU-178. Emission units EU-173, EU-174, EU-175, and EU-176 were constructed in July of 1998 and are controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157. Emission units EU-177 and EU-178 are scheduled to be constructed in September of 2006 and will be controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157.

(2) One (1) 250 KW electric induction melting unit capable of processing non-beryllium containing alloy. The three (3) melt pots, with a maximum combined rating of 1,000 pounds per hour, are identified as EU-179, EU-198, and EU-199. This unit is scheduled for construction in September of 2006 with emissions controlled by one (1) cyclone exhausting at stack SV-157.

(3) One (1) 175 KW electric induction melting unit capable of processing beryllium or copper containing alloy or steel alloy. The two (2) melt pots, with a maximum combined rating of 600 pounds per hour, are identified as EU-193 and EU-194. Constructed in March of 1998 with emissions controlled by one (1) cyclone exhausting at stack SV-157.

(4) Ferro-nickel-magnesium and ferrosilicate are used as inoculants in melting process during the production of ductile iron, for metal bonding, at a rate of 2.4 and 2.2 pounds per melt respectively. No flux is used in the melting units.

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 significant source modification authorizes construction of the new emission units. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification 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 call (800) 451-6027, and ask for Keshav Reddy or extension 3-9664, or dial (317) 233-9664.

Sincerely,

Original signed by

Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

Attachments: TSD and Modified Permit
kr
cc: File – La Porte County
La Porte County Health Department
Northwest Regional Office
Air Compliance Section Inspector, Letty Zepeda

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Aero Metals, Inc.
1201 East Lincoln Way
LaPorte, Indiana 46350

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

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

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

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

Exemption No. 091-18232-00074, issued on December 31, 2003
Administrative Amendment No. 091-21010-00074, issued on May 4, 2005
Minor Permit Modification No. 091-18633-00074, issued on August 3, 2005
Administrative Amendment No. 091-21629-00074, issued on September 9, 2005
1st Significant Permit Modification No. 091-21330-00074, issued on January 6, 2006

1st Significant Source Modification No.: 091-23254-00074	Pages Affected: 5,6,28,29,31,34,35,37,39, and 43
Original signed by: Nisha Sizemore, Chief Permits Branch, Office of Air Quality	Issuance Date: February 16, 2007

TABLE OF CONTENTS

SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary steel/brass/copper/aluminum/iron investment casting operation.

Source Address:	1201 East Lincoln Way, LaPorte IN 46350
Mailing Address:	1201 East Lincoln Way, LaPorte IN 46350
General Source Phone Number:	219-326-1976
SIC Code:	3324
County Location:	LaPorte
Source Location Status:	Nonattainment for ozone under 8-hour standard and Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act 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) Five (5) electric induction melting units and their connected melt pots with a total rated capacity of 4,600 pounds metal (steel/brass/copper/aluminum/iron) per hour:

(1) Three (3) 350 KW electric induction melting units capable of processing non-beryllium containing alloy, each with maximum rating of 1000 pounds per hour and consisting of two (2) melt pots with capability to supply power to only one (1) melt pot. The melt pots are identified as EU-173, EU-174, EU-175, EU-176, EU-177 and EU-178. Emission units EU-173, EU-174, EU-175, and EU-176 were constructed in July of 1998, are approved for modification in 2007, and are controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157. Emission units EU-177 and EU-178 are approved for construction in 2007 and will be controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157. The third melter, constructed December 2005, is controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157

(2) One (1) 250 KW electric induction melting unit capable of processing non-beryllium containing alloy, with maximum rating of 1000 pounds per hour and consisting of three (3) melt pots with capability to supply power to only one (1) melt pot. The three (3) melt pots are identified as EU-179, EU-198, and EU-199. This unit is approved for construction in 2007 with emissions controlled by one (1) cyclone exhausting at stack SV-157.

(3) One (1) 175 KW electric induction melting unit, capable of processing beryllium or copper containing alloy or steel alloy, with maximum rating of 600 pounds per hour and consisting of two (2) melt pots with capability to supply power to only one (1) melt pot. The two (2) melt pots are identified as EU-193 and EU-194. Constructed in March of 1998 and approved for modification in 2007 with emissions controlled by one (1) cyclone exhausting at stack SV-157. Emission units EU-193 and EU-194 are subject to the National Emission Standards for

Hazardous Air Pollutants (NESHAPs) for Beryllium, Subpart C because they are located at a foundry which process beryllium alloys as defined in 40 CFR 61.31(j).

(4) Ferro-nickel-magnesium and ferrosilicate are used as inoculants in melting process during the production of ductile iron, for metal bonding, at a rate of 2.4 and 2.2 pounds per melt respectively. Ductile iron can be produced at a maximum rate of 4000 pounds per hour. No flux is used in the melting units.

(b) One (1) shot blaster identified as EU-137, constructed in 2001, three (3) ceramic mold knock out machines identified as EU-038, EU-039, and EU-040 exhaust to cartridge filter SV-179, three (3) shot blasters identified as EU-032, EU-034, and EU-041 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) sandblaster identified as EU-272 controlled by one (1) air collection system (fabric filters), identified as D-003, and all emission units exhausting at one (1) stack identified as SV-157;

(c) Five (5) friction saws identified as EU-224, 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;

(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) Ten (10) 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-189, 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-189;

(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-001 and EU-169, constructed in 1979 and 2005, with two (2) wet scrubbers 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) manual sandblaster identified as EU-293, controlled by a unit filter which vents internally. One (1) 2-inch degater identified as EU-266, one (1) degating machine identified as EU-267, one (1) 4-inch degating machine identified as EU-269, and one (1)

two station key polisher, identified as EU270, each with a total maximum capacity of processing 0.099 tons of steel per hour, exhausting at one (1) stack identified as SV-157.

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) Solvent 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-217, 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-167, 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) vapor canister filter for vapor 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-167, 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-167, 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) Twenty (20) 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);
(xvii) three (3) Burr King belt sanders (Aero-0449, Aero-0376, and Aero-0516); and
(xviii) one (1) four station degater identified as EU-290.

(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) Fourteen (14) 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).

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

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

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

(a) This permit, T091-12683-00074, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

B.3 Enforceability [326 IAC 2-7-7]

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

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

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

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

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

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

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

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

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

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

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

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

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

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

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

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

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

and

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

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

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

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

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

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

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

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

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

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:

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

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

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

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

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

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

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

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

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

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

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

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

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

Northwest Regional Office
Telephone No.: 1-888-209-8892 or,
Telephone No.: 219-757-0265
Facsimile No.: 219-757-0267

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

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

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

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

(A) A description of the emergency;

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

(C) Corrective actions taken.

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

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

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

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

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

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a 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][326 IAC 2-7-10.5]

(a) All terms and conditions of permits established prior to T091-12683-00074 and issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

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

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

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

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

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

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

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

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

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

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

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

(1) That this permit contains a material mistake.

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

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

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

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

B.16 Permit Renewal [326 IAC 2-7-3] [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 46204-2251

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

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

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

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

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

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

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

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

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

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

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

B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

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

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

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

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

(4) The Permittee notifies the:

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

and

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

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

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

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

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

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

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

(3) Any change in emissions; and

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

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

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

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

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

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

B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]

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

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

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

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

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

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

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

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

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

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

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

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

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

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

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

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

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

C.5 Fugitive Dust Emissions [326 IAC 6.5-4]

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 6.5-4 (Fugitive Dust Emissions). 326 IAC 6.5-4-2(4) is not federally enforceable.

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

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

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

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

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or

before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

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

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

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

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

All required notifications shall be submitted to:

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

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

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

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

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

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

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

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

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

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

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

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

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

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

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

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

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

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

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

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

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

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

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

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

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

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

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

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

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

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

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

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

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit(s) (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

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

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

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

(1) monitoring results;

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

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

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

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

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

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

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

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

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

The statement must be submitted to:

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

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(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.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]

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

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with 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)]: Electric Induction Melt Units

(a) Five (5) electric induction melting units and their connected melt pots with a total rated capacity of 4,600 pounds metal (steel/brass/copper/aluminum/iron) per hour:

(1) Three (3) 350 KW electric induction melting units capable of processing non-beryllium containing alloy, each with maximum rating of 1000 pounds per hour and consisting of two (2) melt pots with capability to supply power to only one (1) melt pot. The melt pots are identified as EU-173, EU-174, EU-175, EU-176, EU-177 and EU-178. Emission units EU-173, EU-174, EU-175, and EU-176 were constructed in July of 1998, are approved for modification in 2007, and are controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157. Emission units EU-177 and EU-178 are approved for construction in 2007 and will be controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157. The third melter, constructed December 2005, is controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157.

(2) One (1) 250 KW electric induction melting unit capable of processing non-beryllium containing alloy, with maximum rating of 1000 pounds per hour and consisting of three (3) melt pots with capability to supply power to only one (1) melt pot. The three (3) melt pots are identified as EU-179, EU-198, and EU-199. This unit is approved for construction in 2007 with emissions controlled by one (1) cyclone exhausting at stack SV-157.

(3) One (1) 175 KW electric induction melting unit, capable of processing beryllium or copper containing alloy or steel alloy, with maximum rating of 600 pounds per hour and consisting of two (2) melt pots with capability to supply power to only one (1) melt pot. The two (2) melt pots are identified as EU-193 and EU-194. Constructed in March of 1998 and approved for modification in 2007 with emissions controlled by one (1) cyclone exhausting at stack SV-157. Emission units EU-193 and EU-194 are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Beryllium, Subpart C because they are located at a foundry which process beryllium alloys as defined in 40 CFR 61.31(j).

(4) Ferro-nickel-magnesium and ferrosilicate are used as inoculants in melting process during the production of ductile iron, for metal bonding, at a rate of 2.4 and 2.2 pounds per melt respectively. Ductile iron can be produced at a maximum rate of 4000 pounds per hour. No flux is used in the melting units.

(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.	Stack I.D.	Process Weight Rate (ton/hr)	Allowable Emission Rate (lb/hr)
Melt pots (EU-193 and EU-194)	SV-157	0.3	1.83
Melt pots (EU-173, EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-198 and EU-199)	SV-157	2.0	6.52

(a) Particulate emissions from emission units EU-193 and EU-194 combined shall not exceed 1.83 pounds per hour (lbs/hr).

(b) Particulate emissions from emission units EU-173, EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-198 and EU-199 combined shall not exceed 6.52 lbs/hr.

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

(a) Particulate emissions from emission units EU-193 and EU-194 combined shall not exceed 0.25 lbs/hr.

(b) Particulate emissions from emission units identified as EU-173, EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-198, and EU-199 combined shall not exceed 4.0 lbs/hr.

(c) PM10 emissions from emission units EU-193 and EU-194 combined shall not exceed 0.03 lbs/hr.

(d) PM10 emissions from emission units identified as EU-173, EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-198, and EU-199 combined shall not exceed 4.0 lbs/hr.

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 melt pots, identified as EU-193 and EU-194, except when otherwise specified in 40 CFR 61 Subpart C.

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

(a) 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-193 and EU-194.

(b) The use of any metals containing beryllium by the melt pots designated as EU-173, EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-198 and EU-199, must be approved by the Office of Air Quality (OAQ) before such change may occur.

Compliance Determination Requirements

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

(a) Within five (5) years after the date of the most recent valid stack test, the permittee shall perform beryllium testing on melt pots EU-193 and EU-194 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 the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C-Performance Testing.

(b) Within five (5) years after the date of the most recent valid stack test, the permittee shall

perform PM and PM-10 testing on the electric induction melt pots, identified as EU-173, EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-198 and EU-199,, 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 the most recent valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.6 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 melt pots at all times that the induction melt pots are in operation.

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

D.1.7 Visible Emissions Notations

(a) Visible emission notations of the electric induction melt pots stack exhaust (SV-157) shall be performed once per day 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) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.8 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 -Response to Excursions or Exceedances 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.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.2(a), the Permittee shall maintain records of all materials melted. Records shall include purchase orders and invoices as necessary to verify the composition of input material melted in each melt pot. 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.1.7, the Permittee shall maintain records of visible emission notations of the electric induction melt pots stack exhaust (SV-157) once per day.

(d) 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)]:

(b) One (1) shot blaster identified as EU-137, constructed in 2001, three (3) ceramic mold knock out machines identified as EU-038, EU-039, and EU-040 exhaust to cartridge filter SV-179, three (3) shot blasters identified as EU-032, EU-034, and EU-041 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) sandblaster identified as EU-272 controlled by one (1) air collection system (fabric filters), identified as D-003, and all emission units 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 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)
Emission units EU-038,EU-039, EU-040, EU-032, EU-034, and EU-041	0.49	2.54
Shotblaster (EU-137)	0.099	0.87

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

(a) The total PM and PM-10 emissions shall not exceed 0.011 lbs/hr and 0.009 lbs/hr respectively from the shot blaster identified as EU-032.

(b) The total PM and PM-10 emissions shall not exceed 0.011 lbs/hr and 0.009 lbs/hr respectively from the shot blaster identified as EU-034.

(c) The total PM and PM-10 emissions shall each not exceed 0.004 lbs/hr respectively from the shot blaster identified as EU-041.

(d) The total PM and PM-10 emissions shall each not exceed 0.002 lbs/hr respectively from the sand blaster identified as EU-272.

(e) The total PM and PM-10 emissions shall each not exceed 0.25 lbs/hr respectively from each of the ceramic mold knock out machines identified as EU-038, EU-039 and EU-040.

(f) PM and PM10 emissions shall each not exceed 0.004 lbs/hr from the shot blaster identified as EU-137.

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

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The Permittee shall perform PM and PM10 testing of the shotblasting, knock out machines, and sandblasting facilities (Stack 158), at least once every five (5) years from the date of the most recent valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted utilizing methods as approved by the Commissioner and in accordance with Section C- Performance Testing.

D.2.4 Particulate Matter (PM)

(a) 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.

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

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

D.2.5 Visible Emissions Notations

(a) Visible emission notations of the shotblasting, knock out machines, and sandblasting facilities stack exhausts (Stack 157) shall be performed once per day 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) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.2.6 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 -Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.2.7 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 day 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- Response to Excursions and Exceedances. 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 -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.2.8 Broken or Failed Bag Detection

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

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

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

D.2.9 Record Keeping Requirements

(a) To document compliance with Condition D.2.5, the Permittee shall maintain records of visible emission notations of the shotblasting, knock out machines, and sandblasting facilities stack exhaust once per day.

(b) To document compliance with Condition D.2.7, the Permittee shall maintain once per day records of the total static pressure drop during normal operation when venting to the atmosphere.

(c) 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)]:

(c) Five (5) friction saws identified as EU-224, 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;

(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;

(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-224, EU-225, EU-223,EU-222, and EU-221)	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) PM and PM-10 emissions shall each not exceed 0.73 pounds per hour (lbs/hr) from each

of the Friction Saws identified as EU-221, EU-222, EU-223, EU-224, and EU-225.

(b) PM and PM-10 emissions shall each not exceed 0.064 lbs/hr from each of the Silica Sand Rainfall Units identified as EU-049 and EU-050.

(c) PM and PM-10 emissions shall each not exceed 0.064 lbs/hr from the Silica Rainfall/Fluidized Bed Sander identified as EU-111.

(d) PM and PM-10 emissions shall each not exceed 0.064 lbs/hr from the Zircon Mix Tank identified as EU-131.

(e) PM and PM-10 emissions shall each not exceed 0.25 lbs/hr from the Fluidized Sand Bed identified as EU-088.

(f) PM and PM-10 emissions shall each not exceed 0.08 lbs/hr from the Rainfall Sander/Fluidized Bed identified as EU-087.

(g) PM and PM-10 emissions shall each not exceed 0.06 lbs/hr from the Silica Rainfall Sander identified as EU-107.

Compliance with these limits shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration, PSD) not applicable. Compliance with this condition will also satisfy the requirements of Condition D.3.1.

Compliance Determination Requirements

D.3.3 Particulate Matter (PM)

(a) 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.

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

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

D.3.4 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 day 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) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.3.5 Parametric Monitoring

The Permittee shall record the 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 day 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- Response to Excursions and Exceedances. 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 - Response to Excursions and Exceedances, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.6 Broken or Failed Dust Collector Detection

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

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

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

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

D.3.7 Record Keeping Requirements

(a) To document compliance with Condition D.3.4, 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 day.

(b) To document compliance with Condition D.3.5, the Permittee shall maintain once per day records of the total static pressure drop during normal operation when venting to the atmosphere for each dust collector.

(c) 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)]:

(f) Ten (10) 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-189, 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-189;

(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-189)	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 0.25 pounds per hour from each of the wax burn out ovens identified as EU-180 through EU189.

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]

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-189, exhausting to stacks SV-180 through SV-189, respectively, no later than May 2009, 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)]:

(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 two (2) wet scrubbers 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.

(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) manual sandblaster identified as EU-293, controlled by a unit filter which vents internally. One (1) 2-inch degater identified as EU-266, one (1) degating machine identified as EU-267, one (1) 4-inch degating machine identified as EU-269, and one (1) two station key polisher, identified as EU270, each with a total maximum capacity of processing 0.099 tons of steel per hour, 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.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
Degators and key polisher (EU-266, EU-267, EU-269, EU293, 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 0.055 pounds per hour (lbs/hr) from each of the sodium hydroxide solution (caustic) metal parts cleaning units EU-001 and EU-169.

(b) PM and PM10 emissions shall each not exceed 0.03 lbs/hr from the sandblast cabinet system, identified as EU-260.

(c) PM and PM10 emissions shall each not exceed 0.03 lbs/hr from each of the sandblasters identified as EU-284, EU-285, EU-286 and EU-287.

(d) PM and PM10 emissions shall each not exceed 0.07 lbs/hr from each of the emission units: 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).

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

Compliance Determination Requirement

D.5.3 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 all the emission units 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 Activities

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

(i) One (1) Solvent 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;

(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

(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
(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;
(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:
  (i) One (1) surface grinder identified as EU-012, utilizing one (1) dust collector for particulate matter control, and exhausting through stack SV-217, 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) vapor canister filter for vapor 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-167, 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;
(6) One (1) two-head degator, identified as EU-046;
(7) One (1) surface mill machine identified as EU-025;
(8) 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);
(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;
(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;
(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 (lbs/hr) 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 [326 IAC 6-3-2]

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

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 0.05 lbs/hr.

(b) PM and PM10 emissions shall each not exceed 0.17 lbs/hr from the surface grinder identified as EU-12.

(c) PM and PM10 emissions shall each not exceed 0.15 lbs/hr from each of the CNC Milling Machines identified as EU-274 and EU-292.

(d) PM and PM10 emissions shall each not exceed 0.075 lbs/hr from each of the surface grinders identified as EU-262 and EU-265.

(e) PM and PM10 emissions shall each not exceed 0.01 lbs/hr from the aluminum melt pot.

(f) PM and PM10 emissions shall each not exceed 0.05 lbs/hr from the abrasive saw identified as EU-086.

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: 1201 East Lincoln Way, LaPorte, Indiana 46350
Mailing Address: 1201 East Lincoln Way, 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 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Aero Metals, Inc.
Source Address: 1201 East Lincoln Way, LaPorte, Indiana 46350
Mailing Address: 1201 East Lincoln Way, 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 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

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

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N 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: 1201 East Lincoln Way, LaPorte, Indiana 46350
Mailing Address: 1201 East Lincoln Way, LaPorte, Indiana 46350
Part 70 Permit No.: T091-12683-00074

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

Page 1 of 2

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

Addendum to the Technical Support Document
for a Significant Source and Permit Modification to a Part 70 Operating Permit

Source Name:	Aero Metals, Inc.
Source Location:	1201 East Lincoln Way, LaPorte IN 46350
County:	LaPorte
SIC Code:	3324
Operation Permit No.:	091-12683-00074
Operation Permit Issuance Date:	December 8, 2003
Significant Source Modification No.:	091-23254-00074
Significant Permit Modification No.:	091-23359-00074
Permit Reviewer:	Keshav Reddy

On December 8, 2006, the Office of Air Quality (OAQ) had a notice published in The LaPorte Herald-Argus, LaPorte, Indiana, stating that Aero Metals, Inc. had applied for a Significant Source and Permit Modification. The proposed modification would allow Aero Metals, Inc. ("Aero") to reconfigure existing electric induction melters, remove one (1) electric induction melter, add two (2) new melters and also incorporate changes in the description and identification names of the electric induction melters. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On January 08, 2007, Aero Metals made comments on the proposed Significant Source and Permit Modification. Changes to the permit, as result of the comments received, are shown below with additions shown as **bolded** and deletions shown as ~~strike-through~~ for emphasis. Aero's comments, OAQ's response and any changes to the permit are shown as follows:

Comment 1:
Aero Metals, Incorporated is not engaged in secondary metal processing. Post consumer scrap is not used in our investment casting operations. Ductile iron is produced from raw ingot, pig iron, and plate stock. We do not concur with agency's determination that we are secondary metal processing source.

Response:
The metallurgical industry can be broadly divided into primary and secondary metals production operations. Primary refers to the production of metal from ore. Secondary refers to the production of alloys from ingots and to recovery of metal from scalp and salvage. OAQ reviewed the information provided by Aero with regards to this modification and more specifically with regards to ductile iron production. Ductile iron is produced at Aero using raw ingots, plate stocks and inoculants such as ferro-nickel-magnesium and ferro-silicate. Post consumer scrap metal is not used at the source. OAQ made the decision that Aero was a secondary metal processing facility based on the information provided in AP-42 and other technical sources. No changes were made to the permit due to this comment.

Comment 2:
Each electric induction melting unit is capable of supplying power to only one melt pot at a given time. The additional melt pots are held in reserve to be supplied to the induction melting unit when the active pot is taken out of service for renovation. Please modify the descriptive

information contained in Sections A.2 and D.1 as follows:

(1) Three (3) 350 KW electric induction melting units capable of processing non-beryllium containing alloy. The melt pots [two (2) per melter], with a maximum combined rating of 3000 pounds per hour, are identified as EU-173, EU-174, EU-175, EU-176, EU-177 and EU-178. Two (2) of the three (3) melters were constructed in July of 1998 and are controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157, are approved for modification in 2006, and are controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157. Emission units EU-177 and EU-178 are approved for construction in 2006 and will be controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157.

(2) One (1) 250 KW electric induction melting unit, consisting of three (3) melt pots, capable of processing non-beryllium containing alloy. The three (3) melt pots identified as EU-179, EU-198, and EU-199, each with a maximum rating of 400, 300 and 300 pounds per hour respectively. This unit is approved for construction in 2006 with emissions controlled by one (1) cyclone exhausting at stack SV-157.

(3) One (1) 175 KW electric induction melting unit, consisting of two (2) melt pots, capable of processing beryllium or copper containing alloy or steel alloy. The two (2) melt pots, each with a maximum rating of 300 pounds per hour, are identified as EU-193 and EU-194. Constructed in March of 1998 and approved for modification in 2006 with emissions controlled by one (1) cyclone exhausting at stack SV-157. Emission units EU-193 and EU-194 are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Beryllium, Subpart C because they are located at a foundry which process beryllium alloys as defined in 40 CFR 61.31(j).

Response:
OAQ acknowledges that only one melt pot can be used at induction unit due to power supply and due consideration is given to this point. OAQ prefers the description to be as detailed and representative as possible. Further, it is also important to show whether an emission unit is subject to NESHAP in the description. There will be no change in emissions or rule applicability due to this description change. The conditions pertaining to the emission limitations for the melting units have already been written to incorporate the process rate of the entire melting unit and not individual melt pots, hence a change in description will not impact existing conditions. The description of electric induction melting units in condition A.2 and section D.1 is revised as follows:

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

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

(a) Five (5) electric induction melting units and their connected melt pots with a total rated capacity of 4,600 pounds metal (steel/brass/copper/aluminum/iron) per hour:

(1) Three (3) 350 KW electric induction melting units **capable of processing non-beryllium containing alloy**, each with maximum rating of 1000 pounds per hour and consisting of two (2) melt pots **with capability to supply power to only one (1) melt pot.**~~capable of processing non-beryllium containing alloy~~. The melt pots~~, each with a maximum rating of 500 pounds per hour,~~ are identified as EU-173, EU-174, EU-175, EU-176, EU-177 and EU-178. Emission units EU-173, EU-174, EU-175, and EU-176 were constructed in July of 1998, are approved for modification in 200~~6~~**7**, and are controlled by one (1) cyclone

with emissions exhausting to stack identified as SV-157. Emission units EU-177 and EU-178 are approved for construction in 200~~6~~**7** and will be controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157. The third melter, constructed December 2005, is controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157.

(2) One (1) 250 KW electric induction melting unit **capable of processing non-beryllium containing alloy**, **with maximum rating of 1000 pounds per hour and** consisting of three (3) melt pots **with capability to supply power to only one (1) melt pot.** ~~, capable of processing non-beryllium containing alloy~~. The three (3) melt pots **are** identified as EU-179, EU-198, and EU-199~~, each with a maximum rating of 400, 300 and 300 pounds per hour respectively~~. This unit is approved for construction in 200~~6~~**7** with emissions controlled by one (1) cyclone exhausting at stack SV-157.

(3) One (1) 175 KW electric induction melting unit, **capable of processing beryllium or copper containing alloy or steel alloy**, **with maximum rating of 600 pounds per hour and consisting of two (2) melt pots with capability to supply power to only one (1) melt pot.** ~~consisting of two (2) melt pots, capable of processing beryllium or copper containing alloy or steel alloy.~~ The two (2) melt pots~~, each with a maximum rating of 300 pounds per hour,~~ are identified as EU-193 and EU-194. Constructed in March of 1998 and approved for modification in 200~~6~~**7** with emissions controlled by one (1) cyclone exhausting at stack SV-157. Emission units EU-193 and EU-194 are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Beryllium, Subpart C because they are located at a foundry which process beryllium alloys as defined in 40 CFR 61.31(j).

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description[326 IAC 2-7-5(15)]: Electric Induction Melt Units

(a) Five (5) electric induction melting units and their connected melt pots with a total rated capacity of 4,600 pounds metal (steel/brass/copper/aluminum/iron) per hour:

(1) Three (3) 350 KW electric induction melting units **capable of processing non-beryllium containing alloy**, each with maximum rating of 1000 pounds per hour and consisting of two (2) melt pots **with capability to supply power to only one (1) melt pot.**~~capable of processing non-beryllium containing alloy~~. The melt pots~~, each with a maximum rating of 500 pounds per hour,~~ are identified as EU-173, EU-174, EU-175, EU-176, EU-177 and EU-178. Emission units EU-173, EU-174, EU-175, and EU-176 were constructed in July of 1998, are approved for modification in 200~~6~~**7**, and are controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157. Emission units EU-177 and EU-178 are approved for construction in 200~~6~~**7** and will be controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157. The third melter, constructed December 2005, is controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157.

(2) One (1) 250 KW electric induction melting unit **capable of processing non-beryllium containing alloy**, **with maximum rating of 1000 pounds per hour and** consisting of three (3) melt pots **with capability to supply power to only one (1) melt pot.** ~~, capable of processing non-beryllium containing alloy~~. The three (3) melt pots **are** identified as EU-179, EU-198, and EU-199~~, each with a maximum rating of 400, 300~~

~~and 300 pounds per hour respectively~~. This unit is approved for construction in 200~~6~~**7** with emissions controlled by one (1) cyclone exhausting at stack SV-157.

(3) One (1) 175 KW electric induction melting unit, **capable of processing beryllium or copper containing alloy or steel alloy**, **with maximum rating of 600 pounds per hour and consisting of two (2) melt pots with capability to supply power to only one (1) melt pot.** ~~consisting of two (2) melt pots, capable of processing beryllium or copper containing alloy or steel alloy.~~ The two (2) melt pots~~, each with a maximum rating of 300 pounds per hour,~~ are identified as EU-193 and EU-194. Constructed in March of 1998 and approved for modification in 200~~6~~**7** with emissions controlled by one (1) cyclone exhausting at stack SV-157. Emission units EU-193 and EU-194 are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Beryllium, Subpart C because they are located at a foundry which process beryllium alloys as defined in 40 CFR 61.31(j).

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

Comments 3:
Please move the one (1) shot blaster identified as EU-137, constructed in 2001, listed in Section A.2(j) to the unit grouping listed in Section A.2(b). Please revise Section A.2(b) to indicate that the three (3) ceramic mold knock out machines identified as EU-038, EU-039 and EU-040 in Section A.2(b) exhaust to cartridge filter SV-179 which in turn exhausts to stack SV-157. Please modify Section A.2(j) as follows: One (1) manual sandblaster identified as EU-293, controlled by a unit filter which vents internally; One (1) 2-inch degater identified as EU-266; One (1) degating machine identified as EU-267; One (1) 4-inch degating machine identified as EU-269; and one (1) two station key polisher, identified as EU-270, with a total maximum processing capacity of 0.099 tons of steel per hour, exhausting at one (1) stack identified as SV-157.

Response:
OAQ agrees with the description changes in conditions A.2(b) and (j). There were no emission increases or changes in rule applicability. Correspondingly, facility description portion of Sections D.2 and D.5 will also be revised to match the description in condition A.2(b) and (j). Sections D.2, D.5, Facility Description and Condition A.2 are revised as follows:

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

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

(b) **One (1) shot blaster identified as EU-137, constructed in 2001,** ~~T~~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 **exhaust to cartridge filter SV-179**, **three (3) shot blasters identified as EU-032, EU-034, and EU-041** ~~and one (1) sandblaster identified as EU-272~~, 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) sandblaster identified as EU-272 controlled by** one (1) air collection system (fabric filters), identified as D-003, **and all emission units** exhausting at one (1) stack identified as SV-157;

…..

(j) ~~One (1) shot blaster identified as EU-137, constructed in 2001~~, **One (1) manual sandblaster identified as EU-293, controlled by a unit filter which vents internally.** ~~o~~**O**ne (1) 2-inch degater identified as EU-266, one (1) degat~~er~~**ing** machine identified as EU-267, one (1) 4-inch degat~~er~~**ing** machine identified as

EU-269, ~~one (1) sandblaster identified as EU-293,~~ and one (1) two station key polisher, identified as EU270, each 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-157.

……

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(b) **One (1) shot blaster identified as EU-137, constructed in 2001,** ~~T~~**t**~~hree (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 **exhaust to cartridge filter SV-179**, **three (3) shot blasters identified as EU-032, EU-034, and EU-041** ~~and one (1) sandblaster identified as EU-272~~, 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) sandblaster identified as EU-272 controlled by** one (1) air collection system (fabric filters), identified as D-003, **and all emission units** 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.)

SECTION D.5 FACILITY OPERATION CONDITIONS

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

(j) ~~One (1) shot blaster identified as EU-137, constructed in 2001~~, **One (1) manual sandblaster identified as EU-293, controlled by a unit filter which vents internally.** ~~o~~**O**ne (1) 2-inch degater identified as EU-266, one (1) degat~~er~~**ing** machine identified as EU-267, one (1) 4-inch degat~~er~~**ing** machine identified as EU-269, ~~one (1) sandblaster identified as EU-293,~~ and one (1) two station key polisher, identified as EU270, each with a total maximum capacity of processing 0.099 tons of steel per hour, ~~all controlled fo~~particulate matter by an internal micro air collection system (fabric filters), identified as D-002, 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 unit EU-137 was moved from Section D.5 to D.2. This emission unit is subject to emission limitations pursuant to 326 IAC 2-2 and 326 IAC 6-3. Applicable emission limitations are also transferred from Section D.5 to D.2, and hence related conditions are revised as follows:

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 (lbs/hr) when operating at a process weight rate of 0.49 tons per hour. The pounds per hour limitation was calculated using the following equation:~~

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)
Emission units EU-038,EU-039, EU-040, EU-032, EU-034, and EU-041	**0.49**	**2.54**
Shotblaster (EU-137)	**0.099**	**0.87**

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

…..

(f) PM and PM10 emissions shall each not exceed 0.004 lbs/hr from the shot blaster identified as EU-137.

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

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, EU293, 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:

……

~~(e) PM and PM10 emissions shall each not exceed 0.004 lbs/hr from the shot blaster identified as EU-137.~~

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

Compliance Determination Requirement

D.5.3 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~~ **all emission units** listed in Section D.5 at all times that the facilities are in operation.

Comment 4:
Please modify Section A.2(f) to list a total of ten (10) natural gas-fired ovens identified as EU-180 through EU-190 which exhausts to stacks SV-180 through SV-190.

Response:
Aero decommissioned 3 of its natural gas fired ovens. The table showing PSD emissions is revised to reflect the number of emission units. The revised table is provided at the end of this document in the section titled "Permit Level Determination – PSD or Emission Offset". Condition A.2(f) and the facility description portion of the Section D.4, and the emission limitations and compliance requirement conditions pertaining to these emission units are revised as follows:

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

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

(f) ~~Thirteen (13)~~ Ten (10) 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-1~~92~~**89**, 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-1~~92~~**89** ;

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:
(a) ~~Thirteen (13)~~Ten (10) natural gas fired ovens, for removing wax from sand molds, each rated at 0.5 million British thermal units (MMBtu) per hour, identified as EU-180 through EU-1~~92~~**89**, 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-1~~92~~**89**;
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

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:

……

Equipment I.D.	Process Weight Rate (ton/hr)	Allowable Emission Rate (lb/hr)
Wax burn-out ovens (EU-180 through EU-1~~92~~**89**)	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 0.25 pounds per hour from each of the wax burn out ovens identified as EU-180 through EU-1~~92~~**89**.

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]

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-1~~92~~**89**, exhausting to stacks SV-180 through SV-1~~92~~**89**, respectively, no later than May 2009, 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 condensable PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.

Comment 5:
Please modify Section A.3(a)(2)(i) to remove the words Safety Kleen and replace them with solvent. This condition should list: One (1) solvent degreaser, identified as EU-294, using less than 145 gallons per 12 month period.

Response:
OAQ agrees with Aero's request and revises the degreaser description in the insignificant activities list. There will be no changes in emissions or applicable rules. The corresponding changes are also made in the facility description portion of section D.6. Condition A.3 and Section D.6 are revised as follows:

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):

…….

(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~~ **Solvent** Degreaser, identified as EU-294, using less than 145 gallons per 12 month period; and

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~~ **Solvent** Degreaser, identified as EU-294, using less than 145 gallons per 12 month period; and

…….

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

Comment 6:
Please change the stack designation for the surface grinder identified as EU-012 in Section A.3(a)(4)(i) from SV-080 to SV-217.

Response:
OAQ agrees with Aero's request and revises the stack/vent designation for emission unit EU-012, in the insignificant activities list. There will be no changes in emissions or applicable rules. The corresponding changes are also made in the facility description portion of section D.7. Condition A.3 and Section D.7 are revised as follows:

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):

…….

(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~~ **217** which vents internally;

SECTION D.7 FACILITY OPERATION CONDITIONS

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

……..

(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:

(i) One (1) surface grinder identified as EU-012, utilizing one (1) dust collector for particulate matter control, and exhausting through stack SV-~~080~~ **217**, which vents internally;

…….

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

Comment 7:
Please modify Section A.3(a)(4)(iii) to correctly reflect the control device used by the milling machines as follows: Two (2) EDM milling machines identified as EU-275 and EU-276, constructed in 1998, each with a maximum capacity of 0.06 pounds of Carbon per hour, utilizing one (1) vapor canister filter for vapor control, exhausting through SV-163, which vents internally.

Response:
EDM milling machines identified as EU-275 and EU-276 have been erroneously listed in the past air pollution permits as having potential emissions of PM and PM10. These units were required to operate fabric filter cartridges to comply with conditions D.7.4 and D.7.6. Aero requested to change the description for this emission unit to include vapor canister for vapor control. Upon further review and additional information provided by Aero, it is determined that each EDM milling machine uses dielectric fluid oil for its milling operation and the vapors from this operation are collected using vapor canister. The milling process is done in a submerged medium resulting in no PM or PM10 emissions. The potential VOC emissions from each of the EDM milling machine is estimated at 0.02 tons per year. Vapor canister is used to control VOC emissions from the EDM milling machines because the milling machines exhaust to vent SV-163, which vents internally. VOC emissions from each of the emission units are less than twenty (25) tons per year, hence 326 IAC 8-1-6 is not applicable. No other requirements of 326 IAC are applicable to these units.

The changes resulting due to this comment involve changing emission unit description in condition A.3 and revising emission limits in condition D.7.4 which is related to PM and PM10 emissions. There are no physical changes to the emission units and no change in emissions from these units. Further, no emission limits are being relaxed due to this comment. The changes to the permit conditions involve only removal of an emission limit that was based on inaccurate information and will not result in changes of applicable regulations. Hence, no further public notice requirements are necessary. The table showing emissions after controls of all the emission units is also revised to reflect this change and is provided at the end of this document in the section titled "Permit Level Determination – PSD or Emission Offset". Condition A.3, Section D.7 Facility Description and Condition D.7.4 are revised as follows:

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):

……

(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]:

…….

(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~~ **vapor canister filter for vapor** control, and exhausting through stack SV-163, which vents internally;

SECTION D.7 FACILITY OPERATION CONDITIONS

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

……..

(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:

……..

(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~~ **vapor canister filter for vapor control,** and exhausting through stack SV-163, which vents internally;

…….

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

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:

…….

~~(d) PM and PM10 emissions shall each not exceed 0.33 lbs/hr from each of the EDM Milling Machines identified as EU-275 and EU-277.~~

(e**d**) PM and PM10 emissions shall each not exceed 0.075 lbs/hr from each of the surface grinders identified as EU-262 and EU-265.

(f**e**) PM and PM10 emissions shall each not exceed 0.01 lbs/hr from the aluminum melt pot.

(g**f**) PM and PM10 emissions shall each not exceed 0.05 lbs/hr from the abrasive saw identified as EU-086.

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

Comment 8:
Please change the internal stack vent listed in Section A.3(a)(4)(iv) for the one (1) OKK CNC milling machine from SV-197 to SV-167.

Response:
OAQ agrees with Aero's request and revises the stack/vent designation for emission unit OKK CNC Milling Machine identified EU-292, in the insignificant activities list. There will be no changes in emissions or applicable rules. The corresponding changes are also made in the facility description portion of section D.7. Condition A.3 and Section D.7 are revised as follows:

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):

…….

(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]:

(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-~~197~~ **167**, which vents internally;

SECTION D.7 FACILITY OPERATION CONDITIONS

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

……..

(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:

…….

(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-~~197~~ **167**, which vents internally;

…….

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

Comment 9:
Please update the descriptive information contained in Section A.3(b)(13) from twelve (12) to fourteen (14) work benches using trichloroethylene for wax repair;

Response:
OAQ agrees with Aero's request and revises the number of work benches for wax repair, in the insignificant activities list. Emissions from existing work benches are negligible and with addition two (2) more work benches the emissions still remain negligible. There will be no rule applicable to these units and no rules applicable after addition of benches. Condition A.3 is revised as follows:

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

…..

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

…….

(13) ~~Twelve (12)~~ **Fourteen (14)** work benches using trichloroethylene for wax repair;

Comment 10:
Condition D.1.5: It is now greater than five years from the testing date listed in condition D.1.5(a) and (b). Please remove "No later than five (5) years of January 10, 2001" and replace with "no later than five years of the most recent valid compliance demonstration".

Response:
Request to revise the conditions regarding the stack test timelines does not change any limitations or standards, but only clarifies the requirements of compliance demonstration. OAQ agrees with Aero's request and revises Condition D.1.5 as follows:

D.1.5 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,~~ **Within five (5) years after the date of the most recent valid stack test,** the Permittee shall perform beryllium testing on melt pots EU-193 and EU-194 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~~ **the most recent** 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,~~ **Within five (5) years after the date of the most recent valid stack test,** the Permittee shall perform PM and PM-10 testing on the electric induction melt pots, identified as EU-173, EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-198 and EU-199, 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~~ the **most recent** valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.

Comment 11:
Condition D.2.3: All stack tests must be performed prior to SV-157. Please modify condition D.2.3 to remove SV-157 and list only Stack 158. Please modify this condition to remove the listed date of "January 2006" and replace it with "no later than five (5) years of the most recent

valid compliance demonstration."

Response:
OAQ agrees with Aero's request. Stack configuration is such that the equipment listed in Section D.2 are vented to stack SV-158 and with finally through SV-157 to the atmosphere. To test emissions from equipment listed in Section D.2, a stack test should be performed on SV-158. Further, OAQ agrees with Aero's request to revise stack testing timelines and condition D.2.3 is revised as follows:

D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The Permittee shall perform PM and PM10 testing of the shotblasting, knock out machines, and sandblasting facilities (Stack~~s 157 and~~ 158), at least once every five (5) years from the date of **the most recent** valid compliance demonstration ~~of January 2006~~. PM-10 includes filterable and condensable PM-10. Testing shall be conducted utilizing methods as approved by the Commissioner and in accordance with Section C-Performance Testing.

Comment 12:
Condition D.2.5: Stack SV-158 connects to Stack SV-157, therefore visible emission observations cannot be performed on SV-158.Please remove SV-158 from Condition D.2.5 and list only SV-157.

Response:
OAQ agrees with Aero's comment that Visible Emissions can only be observed from Stack 157, as it is the stack that is venting to the atmosphere. Condition D.2.5 is revised, to provide clarification, as follows:

D.2.5 Visible Emissions Notations

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

In addition, due to the change in procedures at OAQ, the listing of Responsible Official (RO) and Authorized Individual (AI) is being removed from the permit. However, OAQ will maintain and update this information in its computer database. Condition A.1 is revised as follows:

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/iron investment casting operation.

~~Responsible Official:~~	~~Environmental Manager~~
Source Address:	1201 East Lincoln Way, LaPorte IN 46350
Mailing Address:	1201 East Lincoln Way, LaPorte IN 46350

……

Permit Level Determination – PSD or Emission Offset

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

practically enforceable in the permit.

EXISTING SOURCE	Potential to Emit (tons/year)							
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	Single HAP	Total HAPs
Friction Saw (EU-221)	3.23	3.23	--	--	--	--	--	--
Friction Saw (EU-222)	3.23	3.23	--	--	--	--	--	--
Friction Saw (EU-223)	3.23	3.23	--	--	--	--	--	--
Friction Saw (EU-224)	3.23	3.23	--	--	--	--	--	--
Friction Saw (EU-225)	3.23	3.23	--	--	--	--	--	--
Shot Blaster (EU-032)	0.05	0.04	--	--	--	--	--	--
Shot Blaster (EU-034)	0.05	0.04	--	--	--	--	--	--
Shot Blaster (EU-041)	0.02	0.02	--	--	--	--	--	--
Ceramic Mold KO Machine (EU-038)	1.10	1.10	--	--	--	--	--	--
Ceramic Mold KO Machine (EU-039)	1.10	1.10	--	--	--	--	--	--
Ceramic Mold KO Machine (EU-040)	1.10	1.10	--	--	--	--	--	--
Sand Blaster	0.01	0.01	--	--	--	--	--	--
Silica Sand Rainfall Sander (EU-49)	0.28	0.28	--	--	--	--	--	--
Silica Sand Rainfall Sander (EU-50)	0.28	0.28	--	--	--	--	--	--
Silica Sand Rainfall Sander (EU-111)	0.28	0.28	--	--	--	--	--	--
Zircon Mix Tank (EU-131)	0.28	0.28	--	--	--	--	--	--
Fluidized Sand Bed (EU-88)	1.13	1.13	--	--	--	--	--	--
Silica Sand rainfall Sander (EU-111)	0.28	0.28	--	--	--	--	--	--
Sanderfluidized bed (EU-087)	0.37	0.37	--	--	--	--	--	--
Thirteen (13) Wax Burn Out Ovens	13.91	13.91	--	--	--	--	--	--
Caustic Metal Parts Cleaning	0.48	0.48	--	--	--	--	--	--
Sandblast (EU -260)	0.15	0.15	--	--	--	--	--	--
Sandblasters (EU-284)	0.15	0.15	--	--	--	--	--	--
Sandblasters (EU-285)	0.15	0.15	--	--	--	--	--	--
Sandblasters (EU-286)	0.15	0.15	--	--	--	--	--	--
Sandblasters (EU-287)	0.15	0.15	--	--	--	--	--	--
Sandblasters (EU-137)	0.02	0.02	--	--	--	--	--	--
Degater (EU-266)	0.32	0.32	--	--	--	--	--	--
Degater (EU-267)	0.32	0.32	--	--	--	--	--	--
Degater (EU-269)	0.32	0.32	--	--	--	--	--	--
Sandblaster (EU-293)	0.05	0.04	--	--	--	--	--	--
Key Polisher (EU-270)	0.32	0.32	--	--	--	--	--	--
Aluminum Melt Pot	0.05	0.04	1.23	1.23	--	0.84	--	--
Sand Blaster (EU-086)	0.22	0.22	--	--	--	--	--	--
Surface Grinder (EU-12)	0.75	0.75	--	--	--	--	--	--
CNC Mill (EU-274)	0.67	0.67	--	--	--	--	--	--
EDM Milling Machine (EU -275)	--	--	--	0.02	--	--	--	--
EDM Milling Machine (EU- 277)	--	--	--	0.02	--	--	--	--
CNC Mill (EU-292)	0.67	0.67	--	--	--	--	--	--
Surface Grinder (EU-262)	0.33	0.33	--	--	--	--	--	--
Surface Grinder (EU-265)	0.33	0.33	--	--	--	--	--	--
Natural Gas Combustion	0.13	0.52	0.04	0.38	5.77	6.86	0.12	0.13
Insignificant Activities	--	--	--	8.15	--	--	0.67	0.67
Abrasive Saw (SV-060)	0.23	0.23	--	--	--	--	--	--
NG fired ovens (EU-180 through 189)	0.05	0.18	0.01	0.13	2.02	1.20	negl.	negl.

MODIFICATION	PM	PM_{10}	SO_2	VOC	CO	NO_X	HAPs	
							Single	Total
Reconfiguration of existing units (EU-173 through EU-176, EU-193 and EU194) and New Units (EU-177, EU-178, EU-178, EU-198 and EU-199) Stack SV-157	**18.62**	**17.64**	0.00	0.00	0.00	0.00	0.88	0.88
Total for the Entire Source After Modification	60.97	60.48	1.28	11.00	5.84	8.71	0.88	1.68
PSD/EO Major Source Levels	100	100	100	100	100	100	5 (Lead)	-

This existing source is still a minor PSD stationary source after this modification because no criteria pollutants are emitted at a rate greater than the PSD major source thresholds and it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

This existing source is still a minor stationary source after this modification because no criteria pollutants are emitted at a rate greater than the Emission Offset major source thresholds and it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-3-1(g). Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD)
For a Part 70 Significant Source and Significant Permit Modification

Source Description and Location

Source Name:	Aero Metals, Inc.
Source Location:	1201 East Lincoln Way, LaPorte, Indiana 46350
County:	LaPorte
SIC Code:	3324
Part 70 Operation Permit No.:	T091-12683-00074
Part 70 Operation Permit Issuance Date:	December 8, 2003
Significant Source Modification No.:	091-23254-00074
Significant Permit Modification No.:	091-23359-00074
Permit Writer:	Keshav Reddy

Existing Approvals

The source was issued a Part 70 Operating Permit 091-12683-00074 on December 8, 2003. The source has since received the following approvals:

(a) Exemption No. 091-18232-00074 issued on December 31, 2003;
(b) First Administrative Amendment No. 091-21010-00074 issued on May 4, 2005;
(c) Minor Permit Modification No. 091-18633-00074 issued on August 3, 2005;
(d) Administrative Amendment No. 091-21629-00074 issued on September 9, 2005; and
(e) Significant Permit Modification No. 091-21330-00074 issued on January 6, 2006.

County Attainment Status

The source is located in LaPorte County.

County Status	
Pollutant	Status
PM10	Unclassifiable/Attainment
PM2.5	Unclassifiable/Attainment
SO_2	Unclassifiable/Attainment
NO_2	Unclassifiable/Attainment
8-Hour Ozone	Marginal Non-attainment
CO	Unclassifiable/Attainment
Lead	Unclassifiable/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 emission offset, 326 IAC 2-3.

(b) On August 7, 2006, a temporary emergency rule took effect revoking the one-hour ozone standard in Indiana. The Indiana Air Pollution Control Board has approved a permanent rule revision to incorporate these changes into 326 IAC 1-4-1. The permanent revision to 326 IAC 1-4-1 took effect on October 25, 2006.

(c) 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 PM2.5 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 a surrogate for PM2.5 emissions.

(d) 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. Since this source is classified as a secondary metal production plant, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(e) Fugitive Emissions
Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

Source Status

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

PTE of the Entire Source Prior to the Proposed Modification	
Pollutant	Emissions (tons/year)
PM	46.02
PM10	46.32
SO_2	1.28
VOC	10.96
CO	5.84
NO_x	8.71

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(b) This existing source is not a major stationary source, under Emission Offset (326 IAC 2-3), because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or more.

(c) These emissions are based upon Significant Permit Modification No. 091-21330-00074 issued on January 6, 2006 and Part 70 Operating Permit 091-12683-00074 issued on December 8, 2003.

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

HAPs PTE of the Entire Source Prior to the Proposed Modification	
HAPs	Potential To Emit (tons/year)
Hexane	0.12
Lead	0.8
TCE	0.67
TOTAL	1.60

This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because HAPs emissions are less than ten (10) tons per year for a single HAP and twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act.

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.

Actual Emissions of the Entire Source Prior to the Proposed Modification	
Pollutant	Actual Emissions (tons/year)
PM	ND
PM10	0
SO_2	0
VOC	0
CO	1.0
NO_x	1.0
HAP (specify)	ND

*ND denotes no data available.

Background and Description of Proposed Modification and New Source Construction

Aero Metals, Inc. owns and operates a stationary steel/brass/copper/aluminum/iron investment casting operation that produces metal components and parts for various industries. Their process is similar for all metals/ alloys and involves: machining metal dies; producing wax patterns; making sand molds using the wax patterns; melting; pouring; cooling; washing off sand molds; and finishing of metal components. The main processes at this casting operation plant can be described as follows:

Wax is pushed through the metal casts or machined metal dies to create the desired wax patterns. These wax patterns are dipped in water based sand-adhesive and coated with fine mold sand. The wax patterns are let to dry so that the adhesive bonds the sand together to take the shape of the mold. Then the wax pattern is sent through a steam autoclave to recover the wax. Sand molds are fired in a high temperature furnace to achieve desired hardness and strength. A variety of metals and alloys, in the form of bars, billets, and in-house returns are manually charged into the electric induction melting units. Molten metal is poured into the mold and cooled in ambient conditions until the molten metal is solidified. The mold sand is washed away with high-pressure spray of water to recover the metal castings. The mold sand is sent to landfill for disposal and the metal castings are finished (cut and polished) to the client specifications.

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Aero Metals, Inc. on June 21, 2006 with additional information received on August 16, 2006 and September 14, 2006, relating to reconfiguration of existing electric induction melters, removal of one (1) electric induction melter, addition of two (2) new melters and also changes in the description and identification names of the electric induction melters. The following is a list of the new and modified emission units and pollution control devices:

Five (5) electric induction melting units and their connected melt pots with a total rated capacity of 4,600 pounds metal (steel/brass/copper/aluminum) per hour:

(1) Three (3) 350 KW electric induction melting units, each with two (2) melt pots, capable of processing non-beryllium containing alloy. The melt pots, each with a maximum rating of 500 pounds per hour, are identified as EU-173, EU-174, EU-175, EU-176, EU-177 and EU-178. Emission units EU-173, EU-174, EU-175, and EU-176 were constructed in July of 1998, are approved for modification in 2006, and are controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157. Emission units EU-177 and EU-178 are approved for construction in 2006 and will be controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157.

(2) One (1) 250 KW electric induction melting unit, consisting of three (3) melt pots, capable of processing non-beryllium containing alloy. The three (3) melt pots identified as EU-179, EU-198, and EU-199, each with a maximum rating of 400, 300 and 300 pounds per hour respectively. This unit is approved for construction in 2006 with emissions controlled by one (1) cyclone exhausting at stack SV-157.

(3) One (1) 175 KW electric induction melting unit, consisting of two (2) melt pots, capable of processing beryllium or copper containing alloy or steel alloy. The two (2) melt pots, each with a maximum rating of 300 pounds per hour, are identified as EU-193 and EU-194. Constructed in March of 1998 and approved for modification in 2006 with emissions controlled by one (1) cyclone exhausting at stack SV-157. Emission units EU-193 and EU-194 are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Beryllium, Subpart C because they are located at a foundry which process beryllium alloys as defined in 40 CFR 61.31(j).

(4) Ferro-nickel-magnesium and ferrosilicate are used as inoculants in melting process during the production of ductile iron, for metal bonding, at a rate of 2.4 and 2.2 pounds per melt respectively. Ductile iron can be produced at a maximum rate of 4000 pounds per hour. No flux is used in the melting units.

Enforcement Issues

There are no pending enforcement actions related to this modification or on the source.

Emission Calculations

See Appendix A of this document for detailed emission calculations of the proposed modification (Appendix A, two (2) pages). The existing four (4) electric induction furnaces are being increased to five (5), however the total metal throughput is not increased. The following table depicts the throughput re-configuration for these furnaces:

	Beryllium Containing Metal	Non-Beryllium Metal	Total
	Existing Configuration		
No. of furnaces	1	3	4
Throughput	900	3700	4600
	New Configuration		
No. of furnaces	1	4	5
Throughput	600	4000	4600

Permit Level Determination – Part 70

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

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

PTE Before Controls of the Proposed Modification	
Pollutant	Potential To Emit (tons/year)
PM	37.25
PM10	35.28
SO_2	-
VOC	-
CO	-
NO_x	-

HAPs Before Controls of the Proposed Modification	
HAPs	Potential To Emit (tons/year)
Lead	0.88
TOTAL	0.88

PTE of the Project			
Pollutant	PTE of New Emission Units (tons/year)	PTE of Modified Emission Units (tons/year)	Total PTE for New and Modified Units (tons/year)
PM	17.52	17.76	37.25
PM10	17.52	17.52	35.28
SO_2	-	-	-
VOC	-	-	-

PTE of the Project			
Pollutant	PTE of New Emission Units (tons/year)	PTE of Modified Emission Units (tons/year)	Total PTE for New and Modified Units (tons/year)
CO	-	-	-
NO_X	-	-	-
HAPs	0.44	0.44	0.88

This source modification is subject to 326 IAC 2-7-10.5(f)(4)(A), because this modification has a potential to emit particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM10) greater than twenty-five (25) tons per year. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d)(1) because it cannot qualify as minor permit modification pursuant to 326 IAC 2-7-12(b)(1)(C)(ii) or as administrative amendment under 326 IAC 2-7-11.

Permit Level Determination – PSD or Emission Offset

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

EXISTING SOURCE	**Potential to Emit (tons/year)**							
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	Single HAP	Total HAPs
Friction Saw (EU-221)	3.23	3.23	--	--	--	--	--	--
Friction Saw (EU-222)	3.23	3.23	--	--	--	--	--	--
Friction Saw (EU-223)	3.23	3.23	--	--	--	--	--	--
Friction Saw (EU-224)	3.23	3.23	--	--	--	--	--	--
Friction Saw (EU-225)	3.23	3.23	--	--	--	--	--	--
Shot Blaster (EU-032)	0.05	0.04	--	--	--	--	--	--
Shot Blaster (EU-034)	0.05	0.04	--	--	--	--	--	--
Shot Blaster (EU-041)	0.02	0.02	--	--	--	--	--	--
Ceramic Mold KO Machine (EU-038)	1.10	1.10	--	--	--	--	--	--
Ceramic Mold KO Machine (EU-039)	1.10	1.10	--	--	--	--	--	--
Ceramic Mold KO Machine (EU-040)	1.10	1.10	--	--	--	--	--	--
Sand Blaster	0.01	0.01	--	--	--	--	--	--
Silica Sand Rainfall Sander (EU-49)	0.28	0.28	--	--	--	--	--	--
Silica Sand Rainfall Sander (EU-50)	0.28	0.28	--	--	--	--	--	--
Silica Sand Rainfall Sander (EU-111)	0.28	0.28	--	--	--	--	--	--
Zircon Mix Tank (EU-131)	0.28	0.28	--	--	--	--	--	--
Fluidized Sand Bed (EU-88)	1.13	1.13	--	--	--	--	--	--
Silica Sand rainfall Sander (EU-111)	0.28	0.28	--	--	--	--	--	--
Sanderfluidized bed (EU-087)	0.37	0.37	--	--	--	--	--	--
Thirteen (13) Wax Burn Out Ovens	13.91	13.91	--	--	--	--	--	--
Caustic Metal Parts Cleaning	0.48	0.48	--	--	--	--	--	--
Sandblast (EU -260)	0.15	0.15	--	--	--	--	--	--
Sandblasters (EU-284)	0.15	0.15	--	--	--	--	--	--
Sandblasters (EU-285)	0.15	0.15	--	--	--	--	--	--

Sandblasters (EU-286)	0.15	0.15	--	--	--	--	--	--
Sandblasters (EU-287)	0.15	0.15	--	--	--	--	--	--
Sandblasters (EU-137)	0.02	0.02	--	--	--	--	--	--
Degater (EU-266)	0.32	0.32	--	--	--	--	--	--
Degater (EU-267)	0.32	0.32	--	--	--	--	--	--
Degater (EU-269)	0.32	0.32	--	--	--	--	--	--
Sandblaster (EU-293)	0.05	0.04	--	--	--	--	--	--
Key Polisher (EU-270)	0.32	0.32	--	--	--	--	--	--
Aluminum Melt Pot	0.05	0.04	1.23	1.23	--	0.84	--	--
Sand Blaster (EU-086)	0.22	0.22	--	--	--	--	--	--
Surface Grinder (EU-12)	0.75	0.75	--	--	--	--	--	--
CNC Mill (EU-274)	0.67	0.67	--	--	--	--	--	--
EDM Milling Machine (EU -275)	1.48	1.48	--	--	--	--	--	--
EDM Milling Machine (EU- 277)	1.48	1.48	--	--	--	--	--	--
CNC Mill (EU-292)	0.67	0.67	--	--	--	--	--	--
Surface Grinder (EU-262)	0.33	0.33	--	--	--	--	--	--
Surface Grinder (EU-265)	0.33	0.33	--	--	--	--	--	--
Natural Gas Combustion	0.13	0.52	0.04	0.38	5.77	6.86	0.12	0.13
Insignificant Activities	--	--	--	8.15	--	--	0.67	0.67
Abrasive Saw (SV-060)	0.23	0.23	--	--	--	--	--	--
NG fired ovens (EU-180 through 192)	0.06	0.23	0.01	1.20	0.07	1.01	negl.	negl.

MODIFICATION	PM	PM_{10}	SO_2	VOC	CO	NO_X	HAPs	
							Single	Total
Reconfiguration of existing units (EU-173 through EU-176, EU-193 and EU194) and New Units (EU-177, EU-178, EU-178, EU-198 and EU-199) Stack SV-157	**18.62**	**17.64**	0.00	0.00	0.00	0.00	0.88	0.88
Total for the Entire Source After Modification	63.94	63.49	1.28	10.96	5.84	8.71	0.88	1.68
PSD/EO Major Source Levels	100	100	100	100	100	100	5 (Lead)	-

This existing source is still a minor PSD stationary source after this modification because no criteria pollutants are emitted at a rate greater than the PSD major source thresholds and it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

This existing source is still a minor stationary source after this modification because no criteria pollutants are emitted at a rate greater than the Emission Offset major source thresholds and it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-3-1(g). Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Emissions calculations (for PSD and EO purposes) for most of the units in the previous permits, Part 70 Operating Permit 091-12683-00074 and its Significant Modification 091-21330-00074, were erroneously based on 326 IAC 6-3-2 calculated allowable levels instead of emissions after controls. This modification will revise all the emission limits that were set using allowable emissions pursuant to 326 IAC 6-3, by using estimates of emissions after controls. Emission estimates for each of the criteria pollutant in the table

above are potential emissions after controls for respective emission units. Estimates of potential emissions after controls made during the review of the Part 70 Operating Permit 091-12683-00074 and its Significant Modification 091-21330-00074 were retained and are shown in the table above. This source was initially determined not to be a secondary metal production facility in the past permits. The source intends to produce ductile iron components, and will now be considered as secondary metal production plant. The major source threshold levels for all criteria pollutants have been adjusted from 250 tons per year to 100 tons per year.

Federal Rule Applicability Determination

The following federal rules were reviewed for their applicability to the source and this modification:

(1) New Source Performance Standards (NSPS) 40 CFR Part 60

This source and the modification are not subject to the requirements of the New Source Performance Standard for Secondary Brass and Bronze Production Plants, 40 CFR 60.130, Subpart M, because this source is a casting operation and not a secondary brass and bronze production facility.

This source and modification are not subject to the requirements of the New Source Performance Standard for Ferroalloy Production Facilities, 40 CFR 60.620, Subpart Z, because this source does not consist of submerged electric arc furnaces and also does not produce ferroalloy.

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

(2) National Emission Standards for Hazardous Air Pollutants (NESHAPs) 40 CFR Part 63

This source and the modification are subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Beryllium, Subpart C because this source is a foundry which process beryllium alloys as defined in 40 CFR 61.31(j). The standards established in the NESHAP have been already incorporated into the Part 70 operation permit. Except for description changes no other changes are made to this permit condition.

This source and the modification are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Iron and Steel Foundries, Subpart EEEEE because this source is a foundry which is not a major source because it does not have the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 20 and 40 CFR Part 63) applicable to this modification.

(3) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:

(a) has a potential to emit before or after controls equal to or greater than the major source threshold for the pollutant involved;

(b) is subject to an emission limitation or standard for that pollutant; and

(c) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the applicability criteria, under 40 CFR 64.1, to each new or modified emission unit involved in the proposed project (modification):

CAM Applicability							
Emission Units	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year) (PM)	Controlled PTE (tons/year) (PM)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
EU-173	Y	Y	4.38	2.19	100	N	N
EU-174	Y	Y	4.38	2.19	100	N	N
EU-175	Y	Y	4.38	2.19	100	N	N
EU-176	Y	Y	4.38	2.19	100	N	N
EU-177	Y	Y	3.50	1.75	100	N	N
EU-178	Y	Y	3.50	1.75	100	N	N
EU-179	Y	Y	3.50	1.75	100	N	N
EU-193	Y	Y	1.10	0.55	100	N	N
EU-194	Y	Y	1.10	0.55	100	N	N
EU-198	Y	Y	3.50	1.75	100	N	N
EU-199	Y	Y	3.50	1.75	100	N	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the new and modified units as part of this modification.

State Rule Applicability Determination

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

(1) Pursuant to 326 IAC 2-1.1-4 (Federal Provisions), in case of a conflict between the state rules and provision of federal law or regulation, the more stringent requirement applies.

(2) 326 IAC 2-2 (Prevention of Significant Deterioration)
This source is not subject to the requirements of 326 IAC 2-2 because it is one of the 28 listed source categories and the limited potential to emit of all regulated pollutants, after controls, are less than 100 tons per year. The following limits, which were provided in the original Title V Permit (T091-12683-00074) issued on December 8, 2003 and Significant Permit Modification (091-21330- 00074) issued on January 6, 2006 are revised, as a result of the changes at the source:

(a) Particulate emissions from emission units EU-193 and EU-194 combined shall be limited to 0.25 pounds per hour (lbs/hr) which is equivalent to 1.1 tons per year. Particulate emissions from emission units identified as EU-173, EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-198, and EU-199 combined shall not exceed 4.0 pounds per hour (lbs/hr) which is equivalent to 17.52 tons per year.

(b) PM10 emissions from emission units EU-193 and EU-194 combined shall be limited to 0.03 pounds per hour (lbs/hr) which is equivalent to 0.13 tons per year. PM10 emissions from emission units identified as EU-173, EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-198, and EU-199 combined shall not exceed 4.0 pounds per hour (lbs/hr) which is equivalent to 17.52 tons per year.

Note that these emission limitations are revised due to changes in emission units configuration and addition of new units. Further, the emission limits that were set using allowable emissions under 326 IAC 6-3, to show compliance with 326 IAC 2-2 (PSD requirements), are also revised by emission limits estimated by using limited potential to emit (limited) after controls. These revised emission limits are shown in the table listed in the section 'Permit Level Determination – PSD or Emission Offset' of this TSD.

(3) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of emission units identified as EU-173, EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-193, EU-194, EU-198, and EU-199 will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

(4) 326 IAC 2-6 (Emission Reporting)
Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted triennially. The first report is due no later than July 1, 2007, and subsequent reports are due every three (3) years thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4. This condition remains as issued in significant permit modification 091-21330-000074.

(5) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, 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 Melt pots (EU-193 and EU-194)	0.3	1.83
Induction melt pots (EU-173, EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-198 and EU-199)	2.0	6.52

Particulate emissions from emission units EU-193 and EU-194 combined shall be limited to 1.83 pounds per hour (lbs/hr). Particulate emissions from emission units EU-173, EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-198 and EU-199 combined shall be limited to 6.52 lbs/hr. Particulate emissions shall be in compliance with 326 IAC 6-3-2 by controlling particulate emissions with a cyclone exhausting through stack SV-157. All the melting pots exhaust to one stack SV-157.

Emission units EU-193 and EU -194 are combined for this rule applicability as they process beryllium containing alloys and have emission factor different than the rest of the units which process non-beryllium containing alloys and metals. Similarly, the non-beryllium melting units are combined for this rule applicability. The cyclone shall be in operation at all times the melt pots are in operation, in order to comply with this limit.

Further, for some emission units which have a common stack or exhaust point the particulate emission rates from each of the unit were added together for one overall limit for purpose of demonstrating compliance with the allowable emission rates pursuant to 326 IAC 6-3-2.

Compliance Determination and Monitoring Requirements

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

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements. 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 under this modification. The new electric induction melt pots, identified as EU-177, EU-178, EU-179, EU-198, and EU-199, have applicable compliance monitoring conditions as specified below:

(1) Once per day visible emissions notations of the stack exhausts (SV-157) shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. 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. 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. 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. If abnormal emissions are observed, the permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

(2) An inspection shall be performed each calendar 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.

(3) 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 – Response to Excursions and Exceedances shall be considered a violation of this permit.

These monitoring conditions are necessary because the cyclones for the induction melting furnaces must operate properly to ensure compliance with 326 IAC 2-2 (PSD) and 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes). These requirements are already listed in the previously issued Significant Permit Modification (091-21330- 00074) issued on January 6, 2006. The existing condition is only revised to show the new stack vent identification SV-157.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T091-12683-00074. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

1. **Compliance Section Telephone**

All references to the IDEM, OAQ, Compliance Section telephone number have been revised as follows: ~~317-233-5674~~ **317-233-0178**.

All references to the IDEM, OAQ, Compliance Section facsimile number have been revised as follows: ~~317-233-5967~~ **317-233-6865**.

The following toll free number is added to contact the Northwest Regional Office: **888-209-8892**.

The following Facsimile number is added to contact the Northwest Regional Office: **219-752-0267**.

2. Portion of Condition A.2 has been revised as follows:

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

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

~~(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 furnace 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.~~

(a) Five (5) electric induction melting units and their connected melt pots with a total rating of 4,600 pounds metal (steel/brass/copper/aluminum/iron) per hour:

(1) Three (3) 350 KW electric induction melting units, each with two (2) melt pots, capable of processing non-beryllium containing alloy. The melt pots,

each with a maximum rating of 500 pounds per hour, are identified as EU-173, EU-174, EU-175, EU-176, EU-177 and EU-178. Emission units EU-173, EU-174, EU-175, and EU-176 were constructed in July of 1998, are approved for modification in 2006, and are controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157. Emission units EU-177 and EU-178 are approved for construction in 2006 and will be controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157.

(2) One (1) 250 KW electric induction melting unit, consisting of three (3) melt pots, capable of processing non-beryllium containing alloy. The three (3) melt pots identified as EU-179, EU-198, and EU-199, each with a maximum rating of 400, 300 and 300 pounds per hour respectively. This unit is approved for construction in 2006 with emissions controlled by one (1) cyclone exhausting at stack SV-157.

(3) One (1) 175 KW electric induction melting unit, consisting of two (2) melt pots, capable of processing beryllium or copper containing alloy or steel alloy. The two (2) melt pots, each with a maximum rating of 300 pounds per hour, are identified as EU-193 and EU-194. Constructed in March of 1998 and approved for modification in 2006 with emissions controlled by one (1) cyclone exhausting at stack SV-157. Emission units EU-193 and EU-194 are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Beryllium, Subpart C because they are located at a foundry which process beryllium alloys as defined in 40 CFR 61.31(j).

(4) Ferro-nickel-magnesium and ferrosilicate are used as inoculants in melting process during the production of ductile iron, for metal bonding, at a rate of 2.4 and 2.2 pounds per melt respectively. Ductile iron can be produced at a maximum rate of 4000 pounds per hour. No flux is used in the melting units.

3. The description portion of Section D.1 is revised as follows:

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 furnace 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.~~

(a) Five (5) electric induction melting units and their connected melt pots with a total rated capacity of 4,600 pounds metal (steel/brass/copper/aluminum) per hour:

(1) Three (3) 350 KW electric induction melting units, each with two (2) melt pots, capable of processing non-beryllium containing alloy. The melt pots, each with a maximum rating of 500 pounds per hour, are identified as EU-173, EU-174, EU-175, EU-176, EU-177 and EU-178. Emission units EU-173, EU-174, EU-175, and EU-176 were constructed in July of 1998, are approved for modification in 2006, and are controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157. Emission units EU-177 and EU-178 are approved for construction in 2006 and will be controlled by one (1) cyclone with emissions exhausting to stack identified as SV-157.

(2) One (1) 250 KW electric induction melting unit, consisting of three (3) melt pots, capable of processing non-beryllium containing alloy. The three (3) melt pots identified as EU-179, EU-198, and EU-199, each with a maximum rating of 400, 300 and 300 pounds per hour respectively. This unit is approved for construction in 2006 with emissions controlled by one (1) cyclone exhausting at stack SV-157.

(3) One (1) 175 KW electric induction melting unit, consisting of two (2) melt pots, capable of processing beryllium or copper containing alloy or steel alloy. The two (2) melt pots, each with a maximum rating of 300 pounds per hour, are identified as EU-193 and EU-194. Constructed in March of 1998 and approved for modification in 2006 with emissions controlled by one (1) cyclone exhausting at stack SV-157. Emission units EU-193 and EU-194 are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Beryllium, Subpart C because they are located at a foundry which process beryllium alloys as defined in 40 CFR 61.31(j).

(4) Ferro-nickel-magnesium and ferrosilicate are used as inoculants in melting process during the production of ductile iron, for metal bonding, at a rate of 2.4 and 2.2 pounds per melt respectively. Ductile iron can be produced at a maximum rate of 4000 pounds per hour. No flux is used in the melting units.

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

4. Condition D.1 has been revised as follows:

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.	Stack I.D.	Process Weight Rate (ton/hr)	Allowable Emission Rate (lb/hr)
Induction ~~Furnace (EU-176)~~**Melt pots (EU-193 and EU-194)**	SV-157	~~0.45~~ **0.3**	~~2.40~~ **1.83**
Induction ~~Furnaces (EU-174, 175, and 173)~~**melt pots (EU-173, EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-198 and EU-199)**	SV-157	~~1.85~~ **2.0**	~~6.19~~ **6.52**

(a) Particulate emissions from emission units EU-193 and EU-194 combined shall not exceed 1.83 pounds per hour (lbs/hr).

(b) Particulate emissions from emission units EU-173, EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-198 and EU-199 combined shall not exceed 6.52 lbs/hr.

5. Condition D.1.2 is revised as follows:

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, **EU-177, EU-178, EU-179, EU-193, EU-193, EU-194, EU-198 and EU-199**. Only bars, billets, plate, round, and in-house returns shall be melted in any of the furnace **melt pots.** 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 furnace, 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 furnace, 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 furnace, 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).~~

(a) Particulate emissions from emission units EU-193 and EU-194 combined shall not exceed to 0.25 lbs/hr.

(b) Particulate emissions from emission units identified as EU-173, EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-198, and EU-199 combined shall not exceed 4.0 lbs/hr.

(c) PM10 emissions from emission units EU-193 and EU-194 combined shall not exceed 0.03 lbs/hr.

(d) PM10 emissions from emission units identified as EU-173, EU-174, EU-175, EU-176,

EU-177, EU-178, EU-179, EU-198, and EU-199 combined shall not exceed 4.0 lbs/hr.

6. Condition D.1.3 is revised as follows:

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~~ **melt pots**, identified as ~~EU-176,~~ **EU-193 and EU-194**, except when otherwise specified in 40 CFR 61 Subpart C.

7. Condition D.1.4 is revised as follows:

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

(a) ~~That p~~**P**ursuant 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 ~~EU176,~~ **EU-193 and EU-194.**

(b) The use of any metals containing beryllium by the ~~furnace~~ **melt pots** designated as ~~EU-174, EU-175, and EU-173,~~ **EU-173**, **EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-198 and EU-199**, must be approved by the Office of Air Quality (OAQ) before such change may occur.

8. Condition D.1.5 is revised as follows:

D.1.5 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~~ **melt pots** ~~EU176,~~ **EU-193 and EU-194** 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~~ **melt pots**, identified as ~~EU-174, EU-175, and EU-173,~~ **EU-173**, **EU-174, EU-175, EU-176, EU-177, EU-178, EU-179, EU-198 and EU-199**, 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 condensable PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.

9. Condition D.1.6 shall be revised as follows:

D.1.6 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~~ **melt pots** at all times that the induction ~~furnaces~~ **melt pots** are in operation.

10. Condition D.1.7 shall be revised as follows:

D.1.7 Visible Emissions Notations

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

11. Condition D.1.9 shall be revised as follows:

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.2(a), the Permittee shall maintain records of all materials melted. Records shall include purchase orders and invoices as necessary to verify the composition of input material melted in each ~~furnaces~~ **melt pot**. 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.1.7, the Permittee shall maintain records of visible emission notations of the electric induction ~~melting furnaces~~ **melt pots** stack exhaust (SV-157) once per day.

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

The emission limits that were set using allowable emissions under 326 IAC 6-3, to comply with 326 IAC 2-2, are revised by emission limits estimated by using limited potential to emit after controls. These revised emission limits are shown in the table listed in the section 'Permit Level Determination – PSD or Emission Offset' of this TSD. Due to this change in the emission estimates, the following conditions are revised as follows:

12. Condition D.2.2 is revised as follows:

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.~~

(a) The total PM and PM-10 emissions shall not exceed 0.011 lbs/hr and 0.009 lbs/hr respectively from the shot blaster identified as EU-032.

(b) The total PM and PM-10 emissions shall not exceed 0.011 lbs/hr and 0.009 lbs/hr respectively from the shot blaster identified as EU-034.

(c) The total PM and PM-10 emissions shall each not exceed 0.004 lbs/hr respectively from the shot blaster identified as EU-041.

(d) The total PM and PM-10 emissions shall each not exceed 0.002 lbs/hr respectively from the sand blaster identified as EU-272.

(e) The total PM and PM-10 emissions shall each not exceed 0.25 lbs/hr respectively from each of the ceramic mold knock out machines identified as EU-038, EU-039 and EU-040.

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

13. Condition D.3.2 is revised as follows:

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~~ **0.73** pounds per hour **(lbs/hr)** from each of the Friction Saws (~~EU-033, EU-035, EU-036, EU-037, and EU-133~~ **identified as EU-221, EU-222, EU-223, EU-224, and EU-225**.

~~(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.~~

(b) The total PM and PM-10 emissions shall each not exceed 0.064 lbs/hr from each of the Silica Sand Rainfall Units identified as EU-049 and EU-050.

(c) The total PM and PM-10 emissions shall each not exceed 0.064 lbs/hr from the Silica Rainfall/Fluidized Bed Sander identified as EU-111.

(d) The total PM and PM-10 emissions shall each not exceed 0.064 lbs/hr from the Zircon Mix Tank identified as EU-131.

(e) The total PM and PM-10 emissions shall each not exceed 0.25 lbs/hr from the Fluidized Sand Bed identified as EU-088.

(f) The total PM and PM-10 emissions shall each not exceed 0.08 lbs/hr from the Rainfall Sander/Fluidized Bed identified as EU-087.

(g) The total PM and PM-10 emissions shall each not exceed 0.06 lbs/hr from the Silica Rainfall Sander identified as EU-107.

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

14. Condition D.4.2 is revised as follows:

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~~ **0.25** pounds per hour from each of the wax burn out ovens **identified as** ~~(~~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.

15. Condition D.5.2 is revised as follows:

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~~ **0.055** pounds per hour **(lbs/hr)** from **each of** the sodium hydroxide solution (caustic) metal parts cleaning unit EU-001 and EU-169~~), exhausting at two (2) stacks , identified as SV-168 and SV-169, respectively~~.

(b) The total PM and PM10 emissions shall **each** not exceed ~~0.551~~ **0.03** ~~pounds per hour~~ **lbs /hr** from the sandblast cabinet system, identified as EU-260~~, and exhausting through stack SV-160, which vents internally~~.

(c) The total PM and PM10 emissions shall each not exceed ~~2.20~~ **0.03 lbs/hr** from **each of** the sandblasters **identified as** ~~(~~EU-284, EU-285, EU-286 and EU-287~~), all exhausting at one (1) stack identified as SV-157~~.

(d) The total PM and PM10 emissions shall each not exceed ~~0.87~~ **0.07 lbs/hr** from **each of emission units :** 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-157.~~

(e) The total PM and PM10 emissions shall each not exceed 0.004 lbs/hr from the shot blaster identified as EU-137.

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

16. Condition D.7.4 is revised as follows:

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~~ **0.05** pounds per hour **(lbs/hr).**

~~(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 twenty (20) 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.~~

(b) The total PM and PM10 emissions shall each not exceed 0.17 lbs/hr from the surface grinder identified as EU-12.

(c) The total PM and PM10 emissions shall each not exceed 0.15 lbs/hr from each of the CNC Milling Machines identified as EU-274 and EU-292.

(d) The total PM and PM10 emissions shall each not exceed 0.33 lbs/hr from each of the EDM Milling Machines identified as EU-275 and EU-277.

(e) The total PM and PM10 emissions shall each not exceed 0.075 lbs/hr from each of the surface grinders identified as EU-262 and EU-265.

(f) The PM and PM10 emissions shall each not exceed 0.01 lbs/hr from the aluminum melt pot.

(g) The PM and PM10 emissions shall each not exceed 0.05 lbs/hr from the abrasive saw identified as EU-086.

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

Conclusion and Recommendation

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 091-23254-00074 and Significant Permit Modification 091-23359-00074. The staff recommends to the Commissioner that this Part 70 Minor Source and Significant Permit Modification be approved.

IDEM Contact

Questions regarding this administrative amendment can be directed to Mr. Keshav Reddy at the Indiana Department Environmental Management, Office of Air Quality, 100 North Senate Avenue, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-9664 or toll free at 1-800-451-6027 extension 3-9664.

For additional information about air permits and how the public can participate, see IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.in.gov/idem/permits/guides.

Appendix A: Emission Calculations

Company Name:	**Aero Metals, Inc.**
Address City IN Zip:	**1201 E. Lincolnway Laporte IN**
SSM No.:	**091-23254-00074**
SPM No.:	**091-23359-00074**
Reviewer:	**Keshav Reddy**
Date:	**September 14, 2006**

EXISTING RECONFIGURED UNITS

EU-173, EU-174, EU-175, and EU-176 combined @ 1 ton per hour of non-beryllium containing alloy:

Controlled Emissions:

PM =	1.0 ton/hr x 0.84 lb/ton =	0.84	lb/hr	=	**3.68** **ton/yr**
PM10 =	1.0 ton/hr x 0.09 lb/ton =	0.09	lb/hr	=	**0.39** **ton/yr**

Uncontrolled Emissions (@ 50% control efficiency) = **7.36** **ton/yr**

0.79 **ton/yr**

EU-193 and EU-194 @ 0.3 tons per hour of beryllium containing alloy:

Controlled Emissions:

PM =	0.3 ton/hr x 0.86 lb/ton =	0.252	lb/hr	=	**1.10** **ton/yr**
PM10 =	0.3 ton/hr x 0.15 lb/ton =	0.027	lb/hr	=	**0.12** **ton/yr**

Uncontrolled Emissions (@ 50% control efficiency) = **2.21** **ton/yr**

0.24 **ton/yr**

NEW UNITS

EU-177, EU-178, EU-179, EU-198 and EU-199 combined @ 1 ton per hour of non-beryllium containing alloy:

Controlled Emissions:

PM =	1.0 ton/hr x 0.84 lb/ton =	0.84	lb/hr	=	**3.68** **ton/yr**
PM10 =	1.0 ton/hr x 0.09 lb/ton =	0.09	lb/hr	=	**0.39** **ton/yr**

Uncontrolled Emissions (@ 50% control efficiency) = **7.36** **ton/yr**

0.79 **ton/yr**

ADJUSTMENT FOR MAGNESIUM TREATMENT

The source also produces Ductile Iron for different castings. In addition to the above emissions, a worst case scenario is assumed when all non-beryllium melting units (existing and new) are melting ductile iron. In ductile iron production, magnesium treatment is used for alloying a refining resulting in particulate emissions. PTE from the magnesium treatment process is added to the PTE from melting.

Uncontrolled PM and PM 10 emissions = 2 tons/hr * 4.0 lbs /ton of metal treated =8.0 lbs/hr

= **35.04 tons/yr**

Controlled PM & PM 10 emissions @ 50 % control efficiency= **17.52 tons / yr**

NOTE:

Emissions from melting operartions are estimated using emission factors obtained from a stack test conducted at the source in January 2001

An emission factor of 4.0 lbs of PM/ ton of iron produced is taken from AP-42, Table 12.10-7 for magnesium treatment.

PM10 emission estimates from magnesium treatment are made assuming PM10 = PM.

PM/PM10 emissions from ductile iron melting operations are controlled by a cyclone.

Cyclone is assumed to have a control efficiency of 50%, using Good Engineering Practices (GEP).

Appendix A: Emission Calculations

Emissions Summary From The Proposed Modification

Company Name: Aero Metals, Inc.
Address City IN Zip: 1201 E. Lincolnway LaPorte IN 46350
Permit Number: SSM 091-23254-00074
Permit Number: SPM 091-23359-00074
Plt ID: 091-00074
Permit Reviewer: Keshav Reddy
Date: 9/14/2006

Emission Unit	PM	PM10	S02	VOC	CO	Nox	Single HAP	Total HAPs
	Tons/yr	Tons/yr	Tons/yr	Tons/yr	Tons/yr	Tons/yr	Tons/yr	Tons/yr
Existing Reconfigured Units	19.73	17.76					0.44	
New Units	17.52	17.52					0.44	
Emission Before Controls	**37.25**	**35.28**					0.88	
Emissions After Controls	**18.62**	**17.64**					0.88	

Lead Emissions were estimated using Emission Factor, of 0.1 lbs/ ton of gray iron produced, provided in Table 12.10-5 of AP-42.