



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: March 03, 2006
RE: Madison Precision / 077-21943-00019
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

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 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires 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 from 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-AM.dot 1/10/05



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
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Mr. Louis Alexander
Madison Precision Products, Inc.
94 East 400 North
Madison, IN 47250

March 03, 2006

Re: 077-21943-00019
Fourth Notice-Only Change to
MSOP 077-11368-00019

Dear Mr. Alexander:

Madison Precision Products, Inc. was issued a Minor Source Operating Permit (MSOP) on February 10, 2000 for an aluminum part manufacturing for the automotive industry source located at 94 East 400 North, Madison, Indiana 47250. A written request was received by the Office of Air Quality on October 21, 2005 to construct a new melt furnace, identified as P11. Pursuant to the provisions of 326 IAC 2-6.1-6(d), the permit is hereby revised through a notice only change as follows. The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

Change 1:

The new melt furnace has been added to Section A.2 and D.2 as follows. Please note ^{****} denotes that there has been no change to the existing equipment:

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

(***)

- (n) One (1) reverberatory melt furnace, identified as P11, fueled by natural gas only, melting only ingots, with a maximum heat input capacity of 1.7 mmBtu/hr and a maximum melt capacity of 1200 pounds of aluminum per hour, using a maximum of 0.38 pounds of flux per hour, with emissions uncontrolled and exhausting to stack P-11.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description: Melting furnaces

(***)

- (n) One (1) reverberatory melt furnace, identified as P11, fueled by natural gas only, melting only ingots, with a maximum heat input capacity of 1.7 mmBtu/hr and a maximum melt capacity of 1200 pounds of aluminum per hour, using a maximum of 0.38 pounds of flux per hour, with emissions uncontrolled and exhausting to stack P-11.

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

Change 2:

Condition D.2.1 has been revised as follows to include the limit pursuant to 326 IAC 6-3-2 for the new melt furnace. Please note that “****” denotes that there were no changes to the existing conditions:

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to CP077-5045, CP077-10083 and 326 IAC 6-3-2, the particulate matter (PM) from melting furnaces:

(***)

- (i) P11 shall not exceed 2.91 pounds per hour when operating at a process weight rate of 0.60 tons per hour**

Change 3:

Please note the IDEM, OAQ ZIP code has been updated to 46204-2251.

All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire approval has been printed with the revised pages.

This decision is subject to the Indiana Administrative Orders and Procedures Act- IC 4-21.5-3-5. If you have any questions on this matter, please contact Craig J. Friederich c/o OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Original signed by
Kathy Moore, Section Chief
Permits Branch
Office of Air Quality

CJF/MES

Attachments

cc: File - Jefferson County
U.S. EPA, Region V
Jefferson County Health Department
Air Compliance Section Inspector – Cynthia Luxford
Compliance Branch
Administrative and Development Section
Technical Support and Modeling - Michele Boner
Michael Wertz – Heritage Environmental Services, LLC



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MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

**Madison Precision Products, Inc.
 94 East 400 North
 Madison, Indiana 47250**

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

Operation Permit No.: MSOP 077-11368-00019	
Original issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: February 10, 2000 Expiration Date: February 10, 2005

First Notice-only Change 077-12227, issued on May 26, 2000
 Second Notice-only Change 077-14856, issued on October 29, 2001
 Third Notice-only Change 077-16723, issued on February 07, 2003
 First Minor Permit Revision 077-17377-00019, issued on December 5, 2003

Fourth Notice Only Change 077-21943-00019	Sections Affected: A.2, D.2
Issued by: Original signed by Kathy Moore, Section Chief Office of Air Quality	Issuance Date: March 03, 2006

TABLE OF CONTENTS

A	SOURCE SUMMARY	4
A.1	General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]	
A.2	Emission Units and Pollution Control Equipment Summary	
B	GENERAL CONSTRUCTION CONDITIONS	6
B.1	Permit No Defense [IC 13]	
B.2	Definitions	
B.3	Effective Date of the Permit [IC 13-15-5-3]	
B.4	Revocation of Permits [326 IAC 2-1.1-9(5)]	
B.5	Modification to Permit [326 IAC 2]	
B.6	Minor Source Operating Permit [326 IAC 2-6.1]	
C	SOURCE OPERATION CONDITIONS	8
C.1	Emission Limitations	
C.2	Preventive Maintenance Plan [326 IAC 1-6-3]	
C.3	Opacity [326 IAC 5-1]	
C.4	Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]	
C.5	Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]	
C.6	Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]	
C.7	Permit Revocation [326 IAC 2-1-9]	
C.8	Fugitive Dust Emissions [326 IAC 6-4]	
C.9	Performance Testing [326 IAC 3-6]	
C.10	Compliance Monitoring [326 IAC 2-1.1-11]	
C.11	Maintenance of Monitoring Equipment [IC 13-14-1-13]	
C.12	Monitoring Methods [326 IAC 3]	
C.13	Pressure Gauge Specifications	
C.14	Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]	
C.15	Actions Related to Noncompliance Demonstrated by a Stack Test	
	Record Keeping and Reporting Requirements	
C.16	Malfunctions Report [326 IAC 1-6-2]	
C.17	Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-3]	
C.18	General Record Keeping Requirements [326 IAC 2-6.1-2]	
C.19	General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]	
C.20	Annual Notification [326 IAC 2-6.1-5(a)(5)]	
D.1	EMISSIONS UNIT OPERATION CONDITIONS - Shotblasting units	16
	Emission Limitations and Standards	
D.1.1	Particulate Matter (PM) [326 IAC 6-3-2(c)]	
D.1.2	Preventive Maintenance Plan [326 IAC 1-6-3]	
	Compliance Determination Requirements	
D.1.3	Testing Requirements	
	Compliance Monitoring Requirements	
D.1.4	Particulate Matter (PM)	
D.1.5	Visible Emissions Notations	
D.1.6	Parametric Monitoring	
D.1.7	Baghouse and Cartridge Dust Collector Inspections	
D.1.8	Broken Bag or Failure Detection	

Record Keeping and Reporting Requirements

D.1.9 Record Keeping Requirements

D.2 EMISSIONS UNIT OPERATION CONDITIONS: Melting furnaces..... 20

Emission Limitations and Standards

D.2.1 Particulate Matter (PM)

D.2.2 Particulate Matter (PM)

Compliance Determination Requirements

D.2.3 Testing Requirements

Compliance Monitoring Requirements

D.2.4 Visible Emissions Notations

Record Keeping and Reporting Requirements

D.2.5 Record Keeping Requirements

D.3 EMISSIONS UNIT OPERATION CONDITIONS: Insignificant welding units..... 23

Emission Limitations and Standards

D.3.1 Particulate Matter Limitation (PM) [326 IAC 6-3-2]

Compliance Determination Requirements

D.3.2 Testing Requirements

Malfunction Report 24

Annual Notification 26

Affidavit of Construction 27

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 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary source for aluminum part manufacturing for the automotive industry.

Authorized Individual: Mr. Louis Alexander
Source Address: 94 East 400 North, Madison, Indiana 47250
Mailing Address: Route 1, Box 29, 400 North and Michigan Road, Madison, Indiana 47250
Phone Number: 812-273-4702
SIC Code: 3363
County Location: Jefferson
County Status: Attainment for all criteria pollutants, except SO2
Unclassifiable for SO2
Source Status: Minor Source, under PSD Rules;
Minor Source, Section 112 of the Clean Air Act

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) One (1) mechanical shotblasting unit, identified as B1, operation began in May 1989, with a maximum blast rate of 230 pounds per hour, blasting #50 steel grit, and controlled by a cartridge filter.
- (b) One (1) mechanical shotblasting unit, identified as B4, operation began in July 1994, with a maximum blast rate of 140 pounds per hour, blasting #40 zinc cut wire, and controlled by a baghouse.
- (c) One (1) pneumatic shotblasting unit, identified as B5, operation began in February 1994, with a maximum blast rate of 100 pounds per hour, blasting glass beads, and controlled by a baghouse.
- (d) One (1) mechanical shotblasting unit, identified as B6, operation began in 1996, with a maximum blast rate of 320 pounds per hour, blasting carbon steel cut wire, with PM emissions venting to the wet venturi scrubber that serves the mechanical shot blasting unit identified as B-8.
- (e) One (1) mechanical shotblasting unit, identified as B7, with a maximum blast rate of 405 lbs/hr of #50 steel with PM emissions venting to the wet venturi scrubber that serves the mechanical shot blasting unit identified as B-8.
- (f) One (1) mechanical shot blasting unit, identified as B-8, with a maximum blast rate of 1,375 pounds per hour, blasting carbon steel cut wire, controlled by a wet venturi scrubber that exhausts inside the plant.

- (g) Seven (7) melt furnaces, identified as P1 - P7, with maximum heat input capacities of 2.53, 2.53, 3.0, 2.53, 0.68, 0.68, and 2.8 million British thermal units per hour (mmBtu/hr), and maximum aluminum melting capacities of 1500, 1500, 1500, 1500, 450, 450, and 1300 pounds per hour, respectively.
- (h) Two (2) melt furnaces, identified as P8 and P9, fueled by natural gas only, combined heat capacity is 7.6 mmBtu/hr, and with a maximum throughput of aluminum ingots of 3300 pounds per hour.
- (i) One (1) melt furnace, identified as P10, melting only ingots, with a maximum heat input capacity of 2.3 mmBtu/hr and a maximum melt capacity of 1500 pounds of aluminum per hour, using a maximum of 0.32 pounds of flux per hour, with emissions uncontrolled and exhausting to stack P-10.
- (j) Twenty-six (26) natural gas-fired heaters, identified as H1 - H26, with a total maximum capacity of 40.78 mmBtu/hr.
- (k) One (1) stick welding station, with a maximum electrode usage of 200 pounds per year.
- (l) One (1) TIG welding station, with a maximum metal consumption of 20 pounds per year.
- (m) One (1) oxyacetylene flame cutting operation, with a maximum of 36" of metal cut per week.
- (n) One (1) reverberatory melt furnace, identified as P11, fueled by natural gas only, melting only ingots, with a maximum heat input capacity of 1.7 mmBtu/hr and a maximum melt capacity of 1200 pounds of aluminum per hour, using a maximum of 0.38 pounds of flux per hour, with emissions uncontrolled and exhausting to stack P-11.

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit 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 there under, as well as other applicable local, state, and federal requirements.

B.2 Definitions

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, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit 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.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).
- (e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 Emission Limitations

Any change or modification which may increase the potential to emit of particulate matter less than ten (10) microns (PM_{10}), sulfur dioxide (SO_2), volatile organic compounds (VOCs), nitrogen oxides (NO_x) and carbon monoxide (CO) to 100 tons per year or more or any single HAP to 10 tons per year or more and of any combination of HAPs to 25 tons per year or more, must be approved by the Office of Air Quality before any such change may occur.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
- (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;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Opacity [326 IAC 5-1]

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

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

C.4 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 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 should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.5 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

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 permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.6 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.7 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.

- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.8 Fugitive Dust Emissions [326 IAC 6-4]

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

Testing Requirements

C.9 Performance Testing [326 IAC 3-6]

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. 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 Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.10 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. 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).

C.11 Maintenance of Monitoring Equipment [IC 13-14-1-13]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.12 Monitoring Methods [326 IAC 3]

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, or other approved methods as specified in this permit.

C.13 Pressure Gauge Specifications

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

C.14 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
- (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test

- (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 corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (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. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.16 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.17 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.18 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information 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 kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. 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 written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.
- (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.

C.19 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) 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

- (b) 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.
- (c) Unless otherwise specified in this permit, any semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) 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.

C.20 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
- (d) The notification 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.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description: Shotblasting units

- (a) One (1) mechanical shotblasting unit, identified as B1, operation began in May 1989, with a maximum blast rate of 230 pounds per hour, blasting #50 steel grit, and controlled by a cartridge filter.
- (b) One (1) mechanical shotblasting unit, identified as B4, operation began in July 1994, with a maximum blast rate of 140 pounds per hour, blasting #40 chromital stainless steel, and controlled by a baghouse.
- (c) One (1) pneumatic shotblasting unit, identified as B5, operation began in February 1994, with a maximum blast rate of 100 pounds per hour, blasting glass beads, and controlled by a baghouse.
- (d) One (1) mechanical shotblasting unit, identified as B6, operation began in 1996, with a maximum blast rate of 320 pounds per hour, blasting sand, and controlled by cartridge filters.
- (e) One (1) mechanical shotblasting unit, identified as B7, with a maximum blast rate of 405 lbs/hr using a cartridge filter dust collector with no outside stack.
- (f) One (1) mechanical shot blasting unit, identified as B-8, with a maximum blast rate of 1,375 pounds of steel per hour, controlled by a wet venturi scrubber.

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

Emission Limitations and Standards

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to CP077-5045 and 326 IAC 6-3-2, the particulate matter (PM) from shotblasting units:

- (a) B1 shall not exceed 0.82 pounds per hour when operating at a process weight rate of 0.115 tons per hour.
- (b) B4 shall not exceed 0.59 pounds per hour when operating at a process weight rate of 0.07 tons per hour.
- (c) B5 shall not exceed 0.47 pounds per hour when operating at a process weight rate of 0.05 tons per hour.
- (d) B6 shall not exceed 1.2 pounds per hour when operating at a process weight rate of 0.16 tons per hour.
- (e) B7 shall not exceed 1.4 pounds per hour when operating at a process weight rate of 0.201 tons per hour.
- (f) B8 shall not exceed 3.19 pounds per hour when operating at a process weight rate of 0.688 tons per hour.

The pounds per hour limitations were calculated using the following equation:

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

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

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and any control devices.

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.4 Particulate Matter (PM)

The appropriate baghouse or cartridge filters for PM control shall be in operation at all times when the shotblasting units are in operation.

D.1.5 Visible Emissions Notations

- (a) Daily visible emission notations of the shotblasting stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the shotblasting units, at least once weekly when the shotblasting units are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 1.0 to 3.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

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

D.1.7 Baghouse and Cartridge Dust Collector Inspections

An inspection shall be performed each calendar quarter of all bags and cartridge dust collectors controlling the shotblasting units. All inspections 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. If the vents are not redirected, all inspections shall be performed every three months. All defective bags and equipment shall be replaced or repaired.

D.1.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as a malfunction and the Permittee satisfies the requirements of the malfunction of this permit (Section C – Malfunctions Report).
- (b) For single compartment baghouses, 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 a malfunction and the Permittee satisfies the requirements of the malfunction of this permit (Section C – Malfunctions Report).

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.9 Record Keeping Requirements

- (a) To document compliance with Condition D.1.5, the Permittee shall maintain records of daily visible emission notations of the shotblasting stack exhausts.
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain the following:
 - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle: frequency and differential pressure
 - (2) Documentation of all response steps implemented, per event .
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
 - (8) Documentation of the dates vents are redirected.

- (b) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description: Melting furnaces

- (g) Seven (7) melt furnaces, identified as P1 - P7, with maximum heat input capacities of 2.53, 2.53, 3.0, 2.53, 0.68, 0.68, and 2.8 million British Thermal Units per hour (mmBtu/hr), and maximum aluminum melting capacities of 1500, 1500, 1500, 1500, 450, 450, and 1300 pounds per hour, respectively.
- (h) Two (2) melt furnaces, identified as P8 and P9, fueled by natural gas only, combined heat capacity is 7.6 mmBtu/hr, and with a maximum throughput of aluminum ingots of 3300 pounds per hour.
- (i) One (1) melt furnace, identified as P10, melting only ingots, with a maximum heat input capacity of 2.3 mmBtu/hr and a maximum melt capacity of 1500 pounds of aluminum per hour, using a maximum of 0.32 pounds of flux per hour, with emissions uncontrolled and exhausting to stack P-10.
- (n) One (1) reverberatory melt furnace, identified as P11, fueled by natural gas only, melting only ingots, with a maximum heat input capacity of 1.7 mmBtu/hr and a maximum melt capacity of 1200 pounds of aluminum per hour, using a maximum of 0.38 pounds of flux per hour, with emissions uncontrolled and exhausting to stack P-11.

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

Emission Limitations and Standards

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to CP077-5045, CP077-10083 and 326 IAC 6-3-2, the particulate matter (PM) from melting furnaces:

- (a) P1 shall not exceed 2.89 pounds per hour when operating at a process weight rate of 0.75 tons per hour.
- (b) P2 shall not exceed 2.89 pounds per hour when operating at a process weight rate of 0.75 tons per hour.
- (c) P3 shall not exceed 2.89 pounds per hour when operating at a process weight rate of 0.75 tons per hour.
- (d) P4 shall not exceed 2.89 pounds per hour when operating at a process weight rate of 0.75 tons per hour.
- (e) P7 shall not exceed 2.63 pounds per hour when operating at a process weight rate of 0.65 tons per hour.
- (f) P8 shall not exceed one (1) pound per hour when operating at a process weight rate of 1.65 tons per hour.
- (g) P9 shall not exceed one (1) pound per hour when operating at a process weight rate of 1.65 tons per hour.

- (h) P10 shall not exceed 3.38 pounds per hour when operating at a process weight rate of 0.75 tons per hour
- (i) P11 shall not exceed 2.91 pounds per hour when operating at a process weight rate of 0.60 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 sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

D.2.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Particulate Matter Emissions Limitations), the PM from melting furnaces:

- (a) P5 shall not exceed 0.004 pounds per hour when operating at a process weight rate of 3.0×10^{-5} tons per hour.
- (b) P6 shall not exceed 0.004 pounds per hour when operating at a process weight rate of 3.0×10^{-5} 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 sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.3 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Conditions D.2.1 and D.2.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.4 Visible Emissions Notations

- (a) Daily visible emission notations of the melting furnace stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.5 Record Keeping Requirements

- (a) To document compliance with Condition D.2.4, the Permittee shall maintain records of daily visible emission notations of the baghouse stack exhaust.

SECTION D.3

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description: Insignificant welding units

- (k) One (1) stick welding station, with a maximum electrode usage of 200 pounds per year.
- (l) One (1) TIG welding station, with a maximum metal consumption of 20 pounds per year.
- (m) One (1) oxyacetylene flame cutting operation, with a maximum of 36" of metal cut per week.

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

Emission Limitations and Standards**D.3.1 Particulate Matter Limitation (PM) [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the stick welding, TIG welding and oxyacetylene flame cutting operations 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:

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

Compliance Determination Requirements**D.3.2 Testing Requirements [326 IAC 2-1.1-11]**

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/19____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/19____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____

(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Madison Precision Products, Inc.
Address:	94 East 400 North
City:	Madison, Indiana
Phone #:	812-273-4702
MSOP #:	077-11368-00019

I hereby certify that Madison Precision Products, Inc. is still in operation.
 no longer in operation.

I hereby certify that Madison Precision Products, Inc. is in compliance with the requirements of MSOP 077-11368-00019.
 not in compliance with the requirements of MSOP 077-11368-00019.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

Mail to: Permit Administration & Development Section
Office Of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Madison Precision Products Inc.
Route 1, Box 29, 400 North and Michigan Road
Madison, Indiana 47250

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for Madison Precision Products Inc.
(Title)
3. By virtue of my position with _____ Madison Precision Products Inc., I have personal knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of Madison Precision Products Inc.
4. I hereby certify that Madison Precision Products Inc., 94 East 400 North, Madison, Indiana 47250, has constructed the one (1) mechanical shot blasting unit, identified as B-8, in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on September 22, 1999 and as permitted pursuant to **Permit No. 077-11368, Plant ID No. 077-00019** issued on _____.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature

Date

STATE OF INDIANA()SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of
Indiana on this _____ day of _____, 19 _____ .

My Commission expires:

Signature

Name (typed or printed)

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Notice Only Change to a Minor Source Operating Permit

Source Background and Description

Source Name:	Madison Precision Products, Inc.
Source Location:	94 East 400 North, Madison, Indiana 47250
County:	Jefferson
SIC Code:	3363
Operation Permit No.:	MSOP 077-11368-00019
Operation Permit Issuance Date:	February 10, 2000
Notice Only Change No.:	077-21943-00019
Permit Reviewer:	Craig J. Friederich

The Office of Air Quality (OAQ) has reviewed a Revision application from Madison Precision Products, Inc. relating to the construction and operation of the following emission units and pollution control devices:

One (1) reverberatory melt furnace, identified as P11, fueled by natural gas only, melting only ingots, with a maximum heat input capacity of 1.7 mmBtu/hr and a maximum melt capacity of 1200 pounds of aluminum per hour, using a maximum of 0.38 pounds of flux per hour, with emissions uncontrolled and exhausting to stack P-11.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
P-11	Melt Furnace P11	15.0	1.25	16,000	300

Recommendation

The staff recommends to the Commissioner that the MSOP Notice Only Change be approved. This recommendation is based on the following facts and conditions:

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

An application for the purposes of this review was received on October 21, 2005. Additional information was received on December 19, 2005, and January 13, 2006.

Emission Calculations

See pages 1 through 3 of 3 of Appendix A of this document for detailed PM emissions calculations from the new melt furnace as well as from natural gas combustion at the new melt furnace. Below is the emission calculation for fluxing:

The calculation was calculated using SCC# 3-04-001-04 for fluxing:

Throughput of flux = 0.38 lbs/hr
 Amount of fluorine in flux = 6.65%
 $(0.38\text{lbs/hr})(.0665) = 0.025 \text{ lbs/hr} = \text{Throughput of fluorine}$

$0.025\text{lbs/hr} \times 8,760 \text{ hours per year} = 219 \text{ lbs per year}$
 $219\text{lbs}/2000\text{lbs/ton} = 0.110 \text{ tons per year of fluorine}$

Potential To Emit of Revision

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

This table reflects the PTE before controls for this revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.513
PM ₁₀	0.556
SO ₂	0.004
VOC	0.041
CO	0.625
NO _x	0.745

HAPs	Potential To Emit (tons/year)
Fluorine	0.110
TOTAL	0.110

Justification for Revision

The MSOP is being revised through a MSOP Notice Only Change. This revision is being performed pursuant to 326 IAC 2-6.1-6(d)(13) because the modification adds an emission unit of the same type that is already permitted and that will comply with the same applicable requirements and permit terms and conditions as the existing emission unit or units.

County Attainment Status

The source is located in Jefferson County.

Pollutant	Status
PM _{2.5}	Attainment

Pollutant	Status
PM ₁₀	Attainment
SO ₂	Attainment
NO ₂	Attainment
1-Hour Ozone	Attainment
8-Hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Jefferson County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Jefferson County has been classified as attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as surrogate for PM_{2.5} emissions.
- (c) Jefferson County has been classified as attainment or unclassifiable in Indiana for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this proposed modification.
- (b) The provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR 63.1500, Subpart RRR, are not included in this notice only change because it is located at an area source of HAPs, and does not include the operation of a thermal chip dryer, a scrap dryer/delacquering kiln/decoating kiln, a sweat furnace, or a group 1 furnace emission unit processing charge other than clean charge. The new melt furnace is a group 1 furnace processing only clean charge.

State Rule Applicability - Individual Facilities

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

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the one (1) melt furnace, identified as P11, shall be limited to less than 2.91 pounds per hour when operating at a process weight rate of 1,200 pounds per hour (0.60 tons per hour).

This limitation is based on the following equation:

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

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

The unrestricted potential to emit particulate from this furnace is 0.114 pounds per hour. Therefore, the one (1) melt furnace, identified as P11, complies with this rule.

Proposed Changes

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in bold):

Change 1:

The new melt furnace has been added to Section A.2 and D.2 as follows. Please note “***” denotes that there has been no change to the existing equipment:

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

(***)

- (n) **One (1) reverberatory melt furnace, identified as P11, fueled by natural gas only, melting only ingots, with a maximum heat input capacity of 1.7 mmBtu/hr and a maximum melt capacity of 1200 pounds of aluminum per hour, using a maximum of 0.38 pounds of flux per hour, with emissions uncontrolled and exhausting to stack P-11.**

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description: Melting furnaces

(***)

- (n) **One (1) reverberatory melt furnace, identified as P11, fueled by natural gas only, melting only ingots, with a maximum heat input capacity of 1.7 mmBtu/hr and a maximum melt capacity of 1200 pounds of aluminum per hour, using a maximum of 0.38 pounds of flux per hour, with emissions uncontrolled and exhausting to stack P-11.**

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

Change 2:

Condition D.2.1 has been revised as follows to include the limit pursuant to 326 IAC 6-3-2 for the new melt furnace. Please note that “***” denotes that there were no changes to the existing conditions:

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to CP077-5045, CP077-10083 and 326 IAC 6-3-2, the particulate matter (PM) from melting furnaces:

(***)

- (i) P11 shall not exceed 2.91 pounds per hour when operating at a process weight rate of 0.60 tons per hour**

Change 3:

Please note the IDEM, OAQ ZIP code has been updated to 46204-2251.

Conclusion

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed MSOP Notice Only Change No. 077-21943-00019.

**Appendix A: Secondary Metal Production
Reverberatory Furnace Melting Clean Aluminum**

Company Name: Madison Precision Products, Inc.
Address City IN Zip: 94 East 400 North, Madison, IN 47250
Notice Only Change: 077-21943
Plt ID: 077-00019
Reviewer: Craig J. Friederich
Date: October 21, 2005

TYPE OF MATERIAL	Throughput lbs/hr	1 ton/2000 lbs	Throughput ton/hr
Aluminum	1200	2000	0.6

	PM	PM10
Emission Factor (lb/ton charged)	0.19	0.19
Potential Emissions (lbs/hr)	0.114	0.114
Potential Emissions (lbs/day)	2.74	2.74
Potential Emissions (tons/year)	0.499	0.499

Methodology

Potential emissions (lbs/hr) = Throughput (ton/hr) x Emission Factor (lb/ton charged)

Potential emissions (lbs/day) = Potential Emissions (lbs/hr) x 24 (hr/day)

Potential emissions (ton/yr) = Potential Emissions (lbs/hr) x 8760 (hr/yr) / 2000 (lb/ton)

PM and PM-10 emission factors are from the original MSOP (077-11368-00019) for reverberatory furnaces that melt only clean aluminum, including ingots

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

**Company Name: Madison Precision Products, Inc.
Address City IN Zip: 94 East 400 North, Madison, IN 47250
Notice Only Change: 077-21943
Plt ID: 077-00019
Reviewer: Craig J. Friederich
Date: October 21, 2005**

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

1.7000

14.89

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.014	0.057	0.004	0.745	0.041	0.625

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 3 for HAPs emissions calculations.

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

Company Name: Madison Precision Products, Inc.
Address City IN Zip: 94 East 400 North, Madison, IN 47250
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HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.56E-05	8.94E-06	5.58E-04	1.34E-02	2.53E-05

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total HAPs
Potential Emission in tons/yr	3.72E-06	8.19E-06	1.04E-05	2.83E-06	1.56E-05	0.014

Methodology is the same as page 2.

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