

December 13, 2002

**RE: Casting Technology Company 081-15797-00032**

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

### **Notice of Decision: Approval - Effective Immediately**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, 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, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen 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 consideration 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.

Enclosure

FNPER.wpd 8/21/02



*Frank O'Bannon*  
Governor

*Lori F. Kaplan*  
Commissioner

100 North Senate Avenue  
P. O. Box 6015  
Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
[www.state.in.us/idem](http://www.state.in.us/idem)

## MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

**Casting Technology Company  
1450 Musicland Drive  
Franklin, Indiana 46131**

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

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 081-15797-00032	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: December 13, 2002  Expiration Date: December 13, 2007



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### **Emission Limitations and Standards**

Annual Notification  
Malfunction Report

## 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)]

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The Permittee owns and operates a stationary aluminum molding and die casting plant.

Authorized Individual: General Manager  
Source Address: 1450 Musicland Drive, Franklin, Indiana 46131  
Mailing Address: 1450 Musicland Drive, Franklin, Indiana 46131  
General Source Phone: (317) 738-0282  
SIC Code: 3363  
County Location: Johnson  
Source Location Status: Attainment for all criteria pollutants  
Source Status: Minor Source Operating Permit  
Minor Source, under PSD  
Minor Source, Section 112 of the Clean Air Act  
Not 1 of 28 source categories

### A.2 Emissions units and Pollution Control Equipment Summary

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

- (a) Two (2) steel shot blasters, identified as SSB and KSB, each with a maximum process rate of 2,000 pounds of shot per hour, constructed in 1995, with emissions controlled by baghouses, which vent inside the building.
- (b) Five (5) aluminum melters, consisting of the following:
  - (1) One (1) natural gas-fired melter, identified as RVB1, with a maximum heat input of 1.5 MMBtu/hr and a maximum throughput rate of 1,000 pounds of aluminum per hour. This unit was constructed in 1997 and exhausts through stack #RVB1-1.
  - (2) One (1) natural gas-fired melter, identified as RVB2, with a maximum heat input of 11.25 MMBtu/hr and a maximum throughput rate of 3,500 pounds of aluminum per hour. The unit was constructed in 1997 and exhausts through stack #RVB2-2.
  - (3) One (1) natural gas-fired melter, identified as JM1, with a maximum heat input of 3.75 MMBtu/hr and a maximum throughput rate of 2,000 pounds of aluminum per hour. This unit was constructed in 1995 and exhausts through stack #JM1-1.
  - (4) Two (2) natural gas-fired melters, identified as JM2 and JM3, each with a maximum heat input of 4.6 MMBtu/hr and a maximum throughput rate of 4,000 pounds of aluminum per hour. The units were constructed in 1996 and exhausts through stacks #JM2-2 and #JM3-3.
- (c) Twelve (12) aluminum casting machines, constructed in 1995 and comprised of electric holding furnaces and die casting molds, each with a maximum process rate of 1,875

pounds of aluminum per hour. The release agent for the molding process, which is comprised of graphite and water mixture, is controlled by six baghouses (identified as GDC1, GDC2, GDC3, GDC4, GDC5, and GDC6) which vent into the building. The maximum graphite usage is 5.0 pounds per day for each casting machine.

- (d) The welding equipment related to manufacturing activities not resulting in the emission of HAPs and consuming less than 625 pounds of rod or wire per day.
- (e) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including the following:
  - (1) Three (3) heat treat furnaces (identified as HTC1, HTC2, and HTC3), each with a maximum heat input capacity of 5.0 MMBtu/hr, and exhausting through stacks HTC1-1, HTC2-2, and HTC3-3. Furnaces HTC1 and HTC2 were constructed in 1996. Furnace HTC3 was constructed in 1997.
  - (2) Three (3) age ovens(identified as HTA-1, HTA-2, and HTA-3), each with a maximum heat input capacity of 0.8 MMBtu/hr.
  - (3) Four (4) air make-up units, each with a maximum heat input capacity of 3.3 MMBtu/hr.
  - (4) Two (2) air make-up units, each with a maximum heat input capacity of 8.25 MMBtu/hr.
  - (5) Two (2) dock heaters, each with a maximum heat input capacity of 0.2 MMBtu/hr.
  - (6) Five (5) roof top air conditioners/heaters, each with a maximum heat input capacity of 0.2 MMBtu/hr.
  - (7) Two (2) roof top air conditioners/heaters, each with a maximum heat input capacity of 0.16 MMBtu/hr.
  - (8) One (1) roof top air conditioner/heater, with a maximum heat input capacity of 0.65 MMBtu/hr.
  - (9) Two (2) domestic water heaters, each with a maximum heat input capacity of 0.75 MMBtu/hr.

## **SECTION B GENERAL CONDITIONS**

### **B.1 Permit No Defense [IC 13]**

This permit 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.

### **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, the applicable definitions found in the status or regulations 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 Modification to Permit [326 IAC 2]**

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this 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.5 Minor Source Operating Permit [326 IAC 2-6.1]**

- (a) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7 (Fees).
- (b) 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.

### **B.6 Permit Term and Renewal [326 IAC 2-6.1-7(a)] [326 IAC 2-1.1-9.5]**

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

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

### **B.7 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 Branch, Office of Air Quality  
Indiana Department of Environmental Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015

- (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.

B.8 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 (PMPs) within sixty (60) days 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; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement the a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by an "authorized individual as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept 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.9 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015
- Any such application shall be certified by an “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)]

B.10 Inspection and Entry [326 IAC 2-5.1(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.

B.11 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 a 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.

**B.12 Annual Fee Payment [326 IAC 2-1.1-7]**

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- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.
  
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source
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### C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

- (a) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate 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 Part 70 Minor Source Status [326 IAC 2-7]

- (a) The potential to emit any regulated pollutant from the entire source is less than one hundred (100) tons per twelve (12) consecutive month period;
- (b) The potential to emit any individual hazardous air pollutant (HAP) from the entire source is less than ten (10) tons per twelve (12) consecutive month period; and
- (c) The potential to emit any combination of HAPs from the entire source is less than twenty-five (25) tons per twelve (12) consecutive month period.

Therefore, the requirements of 326 IAC 2-7 are not applicable. Any change or modification which may increase potential to emit of any of the pollutant to the levels greater than the limits above, shall cause this source to be considered a major source under Part 70 program, and shall require approval from IDEM, OAQ prior to making the change.

### C.3 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of all criteria pollutant is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAQ prior to making the change.

### C.4 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (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.5 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.6 Fugitive Dust Emissions [326 IAC 6-4]

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

C.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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

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 an "authorized individual" as defined by 326 IAC 2-1.1-1.

- (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) **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 that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

## Testing Requirements

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

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- (a) Compliance testing on new emission 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, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date.

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.
- (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 the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

## **Compliance Requirements [326 IAC 2-1.1-11]**

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

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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**

### **C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

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Any monitoring or testing performed to meet the applicable requirements 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.

## **Record Keeping and Reporting Requirements**

### **C.11 Malfunctions Report [326 IAC 1-6-2]**

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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.12 General Record Keeping Requirements [326 IAC 2-6.1-5]**

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- (a) Records of all required data, reports 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. 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 when operation begins.

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

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- (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, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (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 quarterly or 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 an "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.

**SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS**

**Facility Description [326 IAC 2-6.1]:**

- (a) Two (2) steel shot blasters, identified as SSB and KSB, each with a maximum process rate of 2,000 pounds of shot per hour, constructed in 1995, with emissions controlled by baghouses, which vent inside the building.
- (b) Five (5) aluminum melters, consisting of the following:
  - (1) One (1) natural gas-fired melter, identified as RVB1, with a maximum heat input of 1.5 MMBtu/hr and a maximum throughput rate of 1,000 pounds of aluminum per hour. This unit was constructed in 1997 and exhausts through stack #RVB1-1.
  - (2) One (1) natural gas-fired melter, identified as RVB2, with a maximum heat input of 11.25 MMBtu/hr and a maximum throughput rate of 3,500 pounds of aluminum per hour. The unit was constructed in 1997 and exhausts through stack #RVB2-2.
  - (3) One (1) natural gas-fired melter, identified as JM1, with a maximum heat input of 3.75 MMBtu/hr and a maximum throughput rate of 2,000 pounds of aluminum per hour. This unit was constructed in 1995 and exhausts through stack #JM1-1.
  - (4) Two (2) natural gas-fired melters, identified as JM2 and JM3, each with a maximum heat input of 4.6 MMBtu/hr and a maximum throughput rate of 4,000 pounds of aluminum per hour. The units were constructed in 1996 and exhausts through stacks #JM2-2 and #JM3-3.
- (c) Twelve (12) aluminum casting machines, constructed in 1995 and comprised of electric holding furnaces and die casting molds, each with a maximum process rate of 1,875 pounds of aluminum per hour. The release agent for the molding process, which is comprised of graphite and water mixture, is controlled by six baghouses (identified as GDC1, GDC2, GDC3, GDC4, GDC5, and GDC6) which vent into the building. The maximum graphite usage is 5.0 pounds per day for each casting machine.

(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 2-6.1]**

**D.1.1 Particulate Matter (PM) [326 IAC 2-2]**

The PM emissions from each of the shot blasters, aluminum melters, and casting machines are less than the pound per hour rate listed in the table below:

Process Description	Process ID	PM Emission Limit (lbs/hr)
Steel Shot Blaster	SSB	8.0
Steel Shot Blaster	KSB	8.0
Aluminum Melter	RVB1	0.03
Aluminum Melter	RVB2	0.14
Aluminum Melter	JM1	0.06
Aluminum Melter	JM2	0.09
Aluminum Melter	JM3	0.09

Process Description	Process ID	PM Emission Limit (lbs/hr)
Each Casting Machine	--	0.21

This is equivalent to 83.2 tons per year of PM emissions. Combined with the PM emissions from the welding operations and the natural gas combustion units, the PM emissions from the entire source are less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

Any change or modification which may increase the potential PM emissions from the shot blasters, aluminum melters, or casting machines to greater than the emission rates in the tables above must be approved by the Office of Air Quality before any such change may occur.

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

Pursuant to 326 IAC 6-3-2(e) (Manufacturing Processes), the allowable particulate emissions from each of the shot blasters, aluminum melters, and casting machines shall not exceed the pounds per hour rate listed in the table below:

Process Description	Process ID	Throughput Rate (lbs/hr)	PM Emission Limit (lbs/hr)
Steel Shot Blaster	SSB	2,000	4.10
Steel Shot Blaster	KSB	2,000	4.10
Aluminum Melter	RVB1	1,000	2.58
Aluminum Melter	RVB2	3,500	5.97
Aluminum Melter	JM1	2,000	4.10
Aluminum Melter	JM2	4,000	6.52
Aluminum Melter	JM3	4,000	6.52
Each Casting Machine	--	1,875	3.93

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.1.3 Particulate**

In order to comply with Condition D.1.2, the baghouses used to control particulate emissions from the shot blasters shall be in operation and control emissions from the shot blasters at all times the shot blasters are in operation.

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

**D.1.4 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 an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Malfunctions Report).

- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Malfunctions Report).

## SECTION D.2

## EMISSIONS UNIT OPERATION CONDITIONS

### Facility Description [326 IAC 2-6.1]:

- (d) The welding equipment related to manufacturing activities not resulting in the emission of HAPs and consuming less than 625 pounds of rod or wire per day.
- (e) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including the following:
  - (1) Three (3) heat treat furnaces, (identified as HTC1, HTC2, and HTC3) each with a maximum heat input capacity of 5.0 MMBtu/hr, and exhausting through stacks HTC1-1, HTC2-2, and HTC3-3. Furnaces HTC1 and HTC2 were constructed in 1996. Furnace HTC3 was constructed in 1997.
  - (2) Three (3) age ovens (identified as HTA-1, HTA-2, and HTA-3) , each with a maximum heat input capacity of 0.8 MMBtu/hr.
  - (3) Four (4) air make-up units, each with a maximum heat input capacity of 3.3 MMBtu/hr.
  - (4) Two (2) air make-up units, each with a maximum heat input capacity of 8.25 MMBtu/hr.
  - (5) Two (2) dock heaters, each with a maximum heat input capacity of 0.2 MMBtu/hr.
  - (6) Five (5) roof top air conditioners/heaters, each with a maximum heat input capacity of 0.2 MMBtu/hr.
  - (7) Two (2) roof top air conditioners/heaters, each with a maximum heat input capacity of 0.16 MMBtu/hr.
  - (8) One (1) roof top air conditioner/heater, with a maximum heat input capacity of 0.65 MMBtu/hr.
  - (9) Two (2) domestic water heaters, each with a maximum heat input capacity of 0.75 MMBtu/hr.

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

### Emission Limitations and Standards

There are no specifically applicable requirements that apply to these emission units.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
Compliance Branch**

**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:	Casting Technology Company
Address:	1450 Musicland Drive
City:	Franklin, Indiana 46131
Phone #:	(312) 738-0282
MSOP #:	081-15797-00032

I hereby certify that Casting Technology Company is  still in operation.  
 no longer in operation.

I hereby certify that Casting Technology Company is  in compliance with the requirements of MSOP 081-15797-00032  
 not in compliance with the requirements of MSOP 081-15797-00032

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

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.

<b>Noncompliance:</b>

**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 LBS/HR PARTICULATES ? \_\_\_\_\_, 100 LBS/HR VOC ? \_\_\_\_\_, 100 LBS/HR SULFUR DIOXIDE ? \_\_\_\_\_ OR 2000 LBS/HR OF ANY OTHER POLLUTANT ? \_\_\_\_\_ 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: \_\_\_\_\_

**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. The requirements of this rule (326 IAC 1-6) shall apply to the owner or operator of any facility which has the potential to emit twenty-five (25) pounds per hour of particulates, one hundred (100) pounds per hour of volatile organic compounds or SO<sub>2</sub>, or two thousand (2,000) pounds per hour of any other pollutant; or to the owner or operator of any facility with emission control equipment which suffers a malfunction that causes emissions in excess of the applicable limitation.

**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. (Air Pollution Control Board; 326 IAC 1-2-39; filed Mar 10, 1988, 1:20 p.m. : 11 IR 2373)

**\*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:

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## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document for Minor Source Operating Permit (MSOP)

#### Source Background and Description

Source Name: Casting Technology Company  
 Source Location: 1450 Musicland Drive, Franklin, Indiana 46131  
 County: Johnson  
 SIC Code: 3363  
 Operation Permit No.: 081-15797-00032  
 Permit Reviewer: ERG/YC

On October 21, 2002 the Office of Air Quality (OAQ) had a notice published in the Daily Journal in Franklin, Indiana stating that Casting Technology Company had applied for a Minor Source Operating Permit (MSOP) relating to the operation of an aluminum molding and die casting plant. 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.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified, if applicable, to reflect these changes.

1. A general source phone number has been requested by local agencies and inspectors, so a general number has been added. "County Status" has been replaced with "Source Location Status" in order to clarify when only portions of a county are non-attainment.

#### A.1 General Information [326 IAC 2-5.1-3(c)] [~~326 IAC 2-6.1-4(a)~~]

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The Permittee owns and operates a stationary aluminum molding and die casting plant.

Authorized Individual: General Manager  
 Source Address: 1450 Musicland Drive, Franklin, Indiana 46131  
 Mailing Address: 1450 Musicland Drive, Franklin, Indiana 46131  
**General Source Phone:** **(317) 738-0282**  
 SIC Code: 3363  
 County Location: Johnson  
~~County Status~~  
**Source Location Status:** Attainment for all criteria pollutants  
 Source Status: Minor Source Operating Permit  
 Minor Source, under PSD  
 Minor Source, Section 112 of the Clean Air Act  
 Not 1 of 28 source categories

2. Condition B.2 (Definitions) has been revised for clarification purposes.

**B.2 Definitions**

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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~~ **the** applicable definitions found in **the statutes or regulations** IC 13-11, 326 IAC 1-2, and 326 2-1.1-1 shall prevail.

3. Condition B.6 (Permit Term and Renewal) has been revised and clarified to specify when a renewal application is due.

**B.6 Permit Term and Renewal [326 IAC 2-6.1-7(a)] [326 IAC 2-1.1-9.5]**

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This permit is issued for a fixed term of five (5) years from the ~~original~~ **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**.

**The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.**

4. The Annual Notification has been moved to Section B from Section C.

~~C.16~~**B.7 Annual Notification [326 IAC 2-6.1-5(a)(5)]**

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- (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 Branch, Office of Air Quality  
Indiana Department of Environmental Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015

- (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.

5. Preventive Maintenance Plan condition has been moved to Section B from Section C. The language "Preventive Maintenance Plans" has been replaced with "PMPs" throughout the condition, since it has already been defined. Language was added giving the source a reasonable time to provide a PMP .

**C.3 B.8 Preventive Maintenance Plan [326 IAC 1-6-3]**

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) **within sixty (60) days** 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; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

**If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:**

**Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015**

**The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

- (b) The Permittee shall implement the ~~Preventative Maintenance Plans~~ **PMPs** as necessary to ensure that failure to implement the ~~Preventative Maintenance Plan~~ **a PMP** does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) **A copy of the PMPs** shall be submitted to IDEM, OAQ, upon request **and within a reasonable time**, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. **The PMP does not require the certification by an "authorized individual as defined by 326 IAC 2-1.1-1(1).**
- (d) **Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept 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.**
6. Permit Revision has been moved to Section B from Section C. Permit Revision section (a) has been revised clarifying that the source is not liable for both a permit violation and a rule violation. The authorized individual has been replaced with "an authorized individual", because the rule does not specify that it has to be one individual; this change is made throughout the permit.

**C.4B.9 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]**

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- (a) ~~The Permittee must comply with~~ **Permit revisions are governed by** 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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application shall be certified by ~~the~~ an “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)]

- 7. Conditions for Inspection and Entry and Transfer of Ownership have both been moved from Section C to Section B.

~~E.5 B.10~~ Inspection and Entry [326 IAC 2-5.1(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

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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.

~~E.6 B.11~~ Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

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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 a 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.

- 8. Condition B.12 (Annual Fee Payment) condition was added to the permit to clarify the annual fee requirement.

**B.12 Annual Fee Payment [326 IAC 2-1.1-7]**

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- (a) **The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.**
- (b) **The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.**

9. Section C conditions had to be renumbered due to adding, deleting or transferring conditions. Condition C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour has been added to specify the requirements for processes with low process weight rates. Subsequent conditions have been renumbered.

**C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]**

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- (a) **Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.**
- (b) **Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate 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.**

10. The citation for the Permit Revocation rule has been corrected in Condition C.3 (previously numbered Condition C.7).

**C.74 Permit Revocation [~~326 IAC 2-1-9~~] [326 IAC 2-1.1-9]**

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Pursuant to ~~326 IAC 2-1-9(a)~~ **326 IAC 2-1.1-9** (Revocation of Permits), this permit **to construct and** operate may be revoked for any of the following causes:

11. The statement that “326 IAC 6-4-2(4) is not federally enforceable” has been removed from the condition for Fugitive Dust Emissions.

**C.96 Fugitive Dust Emissions [326 IAC 6-4]**

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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.~~

12. The following condition for Asbestos Abatement Projects has been added to the permit to clarify that these provisions may apply.

**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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015**

**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 an “authorized individual” as defined by 326 IAC 2-1.1-1.**

- (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) 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 that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.**
13. The condition for Performance Testing has been rearranged for clarity. Language has also been added and deleted to indicate that the test protocol and the notification of the test date do not require certification by the authorized individual.

**C.407 Performance Testing [326 IAC 3-6]**

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- (a) Compliance testing on new emission 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, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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) **The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14 days) prior to the actual test date.**
- ~~(b)~~ (c) **Pursuant to 326 IAC 3-6-4(b), all** All test reports must be received by IDEM, OAQ ~~within not later than~~ 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~~ **not later than** 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-~~

14. Compliance Requirements is a new condition that refers to general compliance authority in 326 IAC 2-1.1-11.

**Compliance Requirements [326 IAC 2-1.1-11]**

**C.8 Compliance Requirements [326 IAC 2-1.1-11]**

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**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.**

15. The citations 40 CFR 60 and 40 CFR 63 have been added to the condition for Monitoring Methods.

**C.449 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

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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.

16. The condition for Monitoring Data Availability (previously Condition C.13) has been deleted.

~~C.13 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.~~

17. The General Record Keeping Requirements condition has been revised to be more consistent with the regulation and to clarify that a "reasonable time" will be given for the source to produce the records. The word "Monitoring" has been removed so that the condition is more generalized to all record keeping. The word "reports" has been added to clarify that copies of the reports must also be maintained. Paragraphs (b) and (c) have been removed because they do not provide any additional information.

~~C.1411 General Record Keeping Requirements [326 IAC 2-6.1-2 5]~~

- ~~(a) Records of all required monitoring data, **reports** 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 Response Plan - Preparation, Implementation, Records, and Reports, 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.~~

**(db) Unless otherwise specified in this permit,** a-All record keeping requirements not already legally required shall be implemented when operation begins.

18. The General Reporting Requirements condition has been revised to clarify reporting periods.

C.1512 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, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

(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 quarterly or 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**(e)(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.**

19. Additional information was added to Condition D.1.4 Broken or Failed Bag Detection to describe when a failed unit will be shut down.

#### D.1.4 Broken or Failed Bag Detection

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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 an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Malfunctions Report).
- (b) For single compartment baghouses, **if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then** failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Malfunctions Report).

## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for a Minor Source Operating Permit

#### Source Background and Description

Source Name: Casting Technology Company  
Source Location: 1450 Musicland Drive, Franklin, Indiana 46131  
County: Johnson  
SIC Code: 3363  
Operation Permit No.: 081-15797-00032  
Permit Reviewer: ERG/YC

The Office of Air Quality (OAQ) has reviewed an application from Casting Technology Company relating to the operation of an aluminum molding and die casting plant.

#### Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) Two (2) steel shot blasters, identified as SSB and KSB, each with a maximum process rate of 2,000 pounds of shot per hour, constructed in 1995, with emissions controlled by baghouses, which vent inside the building.
- (b) Five (5) aluminum melters, consisting of the following:
  - (1) One (1) natural gas-fired melter, identified as RVB1, with a maximum heat input of 1.5 MMBtu/hr and a maximum throughput rate of 1,000 pounds of aluminum per hour. This unit was constructed in 1997 and exhausts through stack #RVB1-1.
  - (2) One (1) natural gas-fired melter, identified as RVB2, with a maximum heat input of 11.25 MMBtu/hr and a maximum throughput rate of 3,500 pounds of aluminum per hour. The unit was constructed in 1997 and exhausts through stack #RVB2-2.
  - (3) One (1) natural gas-fired melter, identified as JM1, with a maximum heat input of 3.75 MMBtu/hr and a maximum throughput rate of 2,000 pounds of aluminum per hour. This unit was constructed in 1995 and exhausts through stack #JM1-1.
  - (4) Two (2) natural gas-fired melters, identified as JM2 and JM3, each with a maximum heat input of 4.6 MMBtu/hr and a maximum throughput rate of 4,000 pounds of aluminum per hour. The units were constructed in 1996 and exhausts through stacks #JM2-2 and #JM3-3.

- (c) Twelve (12) aluminum casting machines, constructed in 1995 and comprised of electric holding furnaces and die casting molds, each with a maximum process rate of 1,875 pounds of aluminum per hour. The release agent for the molding process, which is comprised of graphite and water mixture, is controlled by six baghouses (identified as GDC1, GDC2, GDC3, GDC4, GDC5, and GDC6) which vent into the building. The maximum graphite usage is 5.0 pounds per day for each casting machine.

[Note: There are no emissions from the pouring and cooling operations because the die casting process is an enclosed molding process.]

- (d) The welding equipment related to manufacturing activities not resulting in the emission of HAPs and consuming less than 625 pounds of rod or wire per day.

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

(1) Three (3) heat treat furnaces (identified as HTC1, HTC2, and HTC3), each with a maximum heat input capacity of 5.0 MMBtu/hr, and exhausting through stacks HTC1-1, HTC2-2, and HTC3-3. Furnaces HTC1 and HTC2 were constructed in 1996. Furnace HTC3 was constructed in 1997.

(2) Three (3) age ovens (identified as HTA-1, HTA-2, and HTA-3), each with a maximum heat input capacity of 0.8 MMBtu/hr.

(3) Four (4) air make-up units, each with a maximum heat input capacity of 3.3 MMBtu/hr.

(4) Two (2) air make-up units, each with a maximum heat input capacity of 8.25 MMBtu/hr.

(5) Two (2) dock heaters, each with a maximum heat input capacity of 0.2 MMBtu/hr.

(6) Five (5) roof top air conditioners/heaters, each with a maximum heat input capacity of 0.2 MMBtu/hr.

(7) Two (2) roof top air conditioners/heaters, each with a maximum heat input capacity of 0.16 MMBtu/hr.

(8) One (1) roof top air conditioner/heater, with a maximum heat input capacity of 0.65 MMBtu/hr.

(9) Two (2) domestic water heaters, each with a maximum heat input capacity of 0.75 MMBtu/hr.

\*(f) One (1) aluminum trimming and sawing operation.

\*(g) One (1) cleaning and degreasing operation.

\*Note: Emission units (f) and (g) have not been installed at this source and will be deleted from the list of emission units in the MSOP.

### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

### **New Emission Units and Pollution Control Equipment Receiving Prior Approval**

There are no new construction activities included in this permit.

### **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 081-3887-00032, issued on December 19, 1994; and
- (b) Amendment 081-8753-0032, issued on September 16, 1997.

All conditions from previous approvals were incorporated into this permit.

### **Enforcement Issue**

- (a) IDEM is aware that the source did not apply for a minor source operating permit prior November 25, 1999 [i.e., within (12) months after the effective date of 326 IAC 2-6.1].
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

### **Recommendation**

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

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

An application for the purposes of this review was received on April 1, 2002, with additional information received on May 20, 2002, June 28, 2002, August 26, 2002, and September 26, 2002.

### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (pages 1 through 4).

### **Potential To Emit of Source Before Controls**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions 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, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	84.9
PM-10	75.1
SO <sub>2</sub>	0.20
VOC	1.85
CO	28.2
NO <sub>x</sub>	33.6

HAP's	Potential To Emit (tons/year)
TOTAL	*Negligible

\*Note: HAP emissions are from the natural gas combustion. There are no HAP emissions from the aluminum melting furnaces because only clean charge is used and no aluminum refining is required.

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of pollutants are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM, PM10, CO and NOx are greater than 25 tons per year, therefore, the source is subject to the provisions of 326 IAC 2-6.1.
- (c) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of a combination of HAPs is less than twenty-five (25) tons per year, therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (d) **Fugitive Emissions**  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 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.

[Note: According to an EPA memorandum dated December 4, 1998 from Mr. Thomas Curran to the North American Die Casting Association, aluminum die casting facilities are not considered to be secondary metal production plants as defined under PSD regulations because these facilities use only aluminum of a specified alloy and purity for which the quality is guaranteed by contract and for which little fluxing or alloying is required.]

**County Attainment Status**

The source is located in Johnson County.

Pollutant	Status
PM-10	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Johnson County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Johnson County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) **Fugitive Emissions**  
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 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.

### Source Status

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

Pollutant	Emissions (ton/yr)
PM	84.9
PM10	75.1
SO <sub>2</sub>	0.20
VOC	1.85
CO	28.2
NO <sub>x</sub>	33.6

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

### Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) The source does not manufacture aluminum at this plant. Therefore, the New Source Performance Standards for primary aluminum reduction plants (40 CFR 60.190-195, Subpart S) are not applicable to this source.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.
- (d) The source does not manufacture aluminum at this plant. Therefore, the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for primary aluminum reduction plants (40 CFR 63.840-859, Subpart LL) are not applicable to this source.
- (e) The source is an aluminum die casting plant and does not operate a thermal chip dryer, sweat furnace, or scrap dryer. In addition, only pure aluminum (i.e., defined as clean charge in 40 CFR 63, Subpart RRR) is processed at this source. Therefore, the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Secondary Aluminum Production (40 CFR 63.1500-1504, Subpart RRR) are not applicable to this source.

### State Rule Applicability - Entire Source

**326 IAC 2-2 (Prevention of Significant Deterioration (PSD))**

The source was constructed in 1995 and modified in 1997. The source is not in 1 of 28 source categories defined in 326 IAC 2-2-1(p)(1) and the PM emissions from each of the shot blasters, aluminum melters, and casting machines are less than the pounds per hour rate listed in the table below:

Process Description	Process ID	PM Emission Limit (lbs/hr)
Steel Shot Blaster	SSB	8.0
Steel Shot Blaster	KSB	8.0
Aluminum Melter	RVB1	0.03
Aluminum Melter	RVB2	0.14
Aluminum Melter	JM1	0.06
Aluminum Melter	JM2	0.09
Aluminum Melter	JM3	0.09
Each Casting Machine	--	0.21

This is equivalent to 83.2 tons per year of PM emissions. Combined with the PM emissions from the welding operations and the natural gas combustion units, the PM emissions from the entire source are less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 are not applicable.

Any change or modification which may increase the potential PM emissions from the shot blasters, aluminum melters, or casting machines to greater than the emission rates in the tables above must be approved by the Office of Air Quality before any such change may occur.

**326 IAC 2-4.1 (New Sources of Hazardous Air Pollutants)**

The source was constructed prior to July 27, 1997 and the potential to emit HAPs from the entire source before control is less than the major source thresholds. Therefore, the requirements of 326 IAC 2-4.1 are not applicable.

**326 IAC 2-6 (Emission Reporting)**

This source is located in Johnson County and the potential to emit all criteria pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 is not applicable.

**326 IAC 5-1 (Opacity Limitations)**

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

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

**State Rule Applicability - Shot Blasters, Melters, and Casting Machines**

**326 IAC 6-3-2 (Manufacturing Processes)**

Pursuant to 326 IAC 6-3-2(e), the allowable particulate emissions from each of the shot blasters, aluminum melters, and die casting machines shall be limited to the pound per hour limitation 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:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and  
 P = process weight rate in tons per hour

The equivalent particulate limit for each unit is listed in the table below:

Process Description	Process ID	Throughput Rate (lbs/hr)	PM Emission Limit (lbs/hr)
Steel Shot Blaster	SSB	2,000	4.10
Steel Shot Blaster	KSB	2,000	4.10
Aluminum Melter	RVB1	1,000	2.58
Aluminum Melter	RVB2	3,500	5.97
Aluminum Melter	JM1	2,000	4.10
Aluminum Melter	JM2	4,000	6.52
Aluminum Melter	JM3	4,000	6.52
Each Casting Machine	--	1,875	3.93

According to the emission calculations (see Page 1 of Appendix A), the potential to emit PM from each shot blaster (with particulate matter emissions controlled by a 99.9% efficient baghouse) is less than the limit in the table above. Therefore, these shot blasters are in compliance with 326 IAC 6-3-2. The use of baghouses for the shot blasters ensure compliance with the limits above.

According to the emission calculations (see Page 2 and 3 of Appendix A), the potential to emit PM from each of the aluminum melters and the casting machines (before control) is less than the limit in the table above. Therefore, the aluminum melters and the casting machines are in compliance with 326 IAC 6-3-2.

The allowable particulate emission for each shot blaster is less than 10 lbs/hr and the actual particulate emissions from each of the aluminum melters and the die casting machines are less than 25 tons per year. Therefore, the Preventive Maintenance Plan and the compliance monitoring requirements are not applicable for these units.

**State Rule Applicability - Welding Equipment**

**326 IAC 6-3 (Manufacturing Processes)**

The welding operations at this source consume less than 625 pounds of rod or wire per day. Therefore, the welding equipment is exempt from the requirements of 326 IAC 6-3, pursuant to 326 IAC 6-3-1(9).

**State Rule Applicability - Natural Gas Combustion Units**

There are no specifically applicable regulations that apply to these emission units.

**Conclusion**

The operation of this aluminum molding and casting plant shall be subject to the conditions of the attached Minor Source Operating Permit 081-15797-00032.

**Appendix A: Emissions Calculations  
PM and PM10 Emissions  
From Two (2) Steel Shot Blasters**

**Company Name: Casting Technology Company  
Address City IN Zip: 1450 Musicland Drive, Franklin, IN 46131  
MSOP: 081-15797-00032  
Reviewer: ERG/YC  
Date: September 3, 2002**

Unit ID	Max. Shot Usage Rate (lbs/hr)	PM Emission Factor (lbs/lbs)	Potential Control (lbs/hr)	Potential PM (ton/yr)	PM10 Emission Factor (lbs/lbs PM)	Potential PM10 (lbs/hr)	Potential PM10 (ton/yr)	Control Device	Control Efficiency	PTE of PM (lbs/hr)	PTE of PM (ton/yr)	PTE of PM10 (lbs/hr)	PTE of PM10 (ton/yr)
SSB	2000	0.004	8.0	35.0	0.86	6.9	30.1	baghouse	99.0%	0.08	0.35	0.07	0.30
KSB	2000	0.004	8.0	35.0	0.86	6.9	30.1	baghouse	99.0%	0.08	0.35	0.07	0.30
<b>Total</b>				<b>70.1</b>			<b>60.3</b>				<b>0.70</b>		<b>0.60</b>

**Methodology**

Emission Factors are from Air Quality Permits by Stappa Alapco, Section 3, for Abrasive Blasting.

PTE = Potential to Emit

Potential PM Emissions (lbs/hr) = Max. Shot Usage (lbs/hr) x PM Emission Factor (lbs/lbs)

Potential PM (tons/yr) = Max. Shot Usage (lbs/hr) x PM Emission Factor (lbs/lbs) x 8760 hr/yr x 1 ton/ 2000 lb

Potential PM10 Emissions = Potential PM Emissions x PM10 Emission Factor

Potential to Emit = Potential Emissions x (1 - Control Efficiency)

**Appendix A: Emission Calculations  
From Five (5) Aluminum Melters**

**Company Name: Casting Technology Company  
Address City IN Zip: 1450 Musicland Drive, Franklin, IN 46131  
MSOP: 081-15797-00032  
Reviewer: ERG/YC  
Date: September 3, 2002**

**1. From Natural Gas Combustion (<100 MMBtu/hr):**

		Pollutant					
Emission Factor in lb/MMCF		PM*	PM10*	SO <sub>2</sub>	**NO <sub>x</sub>	VOC	CO
		7.6	7.6	0.6	100	5.5	84.0
Unit ID	Heat Input Capacity (MMBtu/hr)	Potential PM Emissions (tons/yr)	Potential PM10 Emissions (tons/yr)	Potential SO <sub>2</sub> Emissions (tons/yr)	Potential NO <sub>x</sub> Emissions (tons/yr)	Potential VOC Emissions (tons/yr)	Potential CO Emissions (tons/yr)
RVB1	1.5	0.05	0.05	0.004	0.66	0.04	0.55
RVB2	11.25	0.37	0.37	0.030	4.93	0.27	4.14
JM1	3.75	0.12	0.12	0.010	1.64	0.09	1.38
JM2	4.6	0.15	0.15	0.012	2.01	0.11	1.69
JM3	4.6	0.15	0.15	0.012	2.01	0.11	1.69
<b>Total</b>	<b>25.70</b>	<b>0.86</b>	<b>0.86</b>	<b>0.07</b>	<b>11.26</b>	<b>0.62</b>	<b>9.46</b>

\*PM and PM10 emission factors are condensable and filterable PM10 combined.

\*\*Emission Factors for NO<sub>x</sub>: Uncontrolled = 100, Low NO<sub>x</sub> Burner = 50, Low NO<sub>x</sub> 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

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

Potential Emission (tons/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu x Emission Factor (lb/MMCF)/2,000 lb/ton

**2. From Aluminum Melting Process:**

		Pollutant			
Emission Factor in lb/ton		PM	PM10*	PM	PM10*
		0.03	0.03	0.03	0.03
Unit ID	Throughput Rate (lbs/hr)	Potential PM Emissions (lbs/hr)	Potential PM10 Emissions (lbs/hr)	Potential PM Emissions (tons/yr)	Potential PM10 Emissions (tons/yr)
RVB1	1,000	0.02	0.02	0.07	0.07
RVB2	3,500	0.05	0.05	0.23	0.23
JM1	2,000	0.03	0.03	0.13	0.13
JM2	4,000	0.06	0.06	0.26	0.26
JM3	4,000	0.06	0.06	0.26	0.26
<b>Total</b>	<b>14,500</b>			<b>0.95</b>	<b>0.95</b>

\* Assume all the PM emissions are PM10 emissions.

**Methodology**

Emission factors are from AP-42, Table 12.11-2, SCC #3-04-004-26 (kettle refining for lead, AP-42, 01/95), which is the only available emission factor for melting of refined (pure) metal process in AP-42.

Emissions (lbs/hr) = Throughput (lbs/hr) x 1 tons/2000 lbs x Emission Factor (lb/ton)

Emissions (tons/yr) = Throughput (lbs/hr) x 1 tons/2000 lbs x 8760 hr/yr x Emission Factor (lb/ton) x 1 lbs/2000ton

**3. Total Uncontrolled Emissions of the Melters (Combustion & Melting Processes):**

Unit ID	Throughput Rate (lbs/hr)	Potential PM Emissions (tons/yr)	Potential PM10 Emissions (tons/yr)	Potential SO <sub>2</sub> Emissions (tons/yr)	Potential NO <sub>x</sub> Emissions (tons/yr)	Potential VOC Emissions (tons/yr)	Potential CO Emissions (tons/yr)
RVB1	1,000	0.12	0.12	0.004	0.66	0.04	0.55
RVB2	3,500	0.60	0.60	0.030	4.93	0.27	4.14
JM1	2,000	0.26	0.26	0.010	1.64	0.09	1.38
JM2	4,000	0.42	0.42	0.012	2.01	0.11	1.69
JM3	4,000	0.42	0.42	0.012	2.01	0.11	1.69
<b>Total</b>	<b>14,500</b>	<b>1.81</b>	<b>1.81</b>	<b>0.07</b>	<b>11.26</b>	<b>0.62</b>	<b>9.46</b>

**Appendix A: Emission Calculations  
Emissions from the Two (2) Die Casting Machines**

**Company Name: Casting Technology Company  
Address City IN Zip: 1450 Musicland Drive, Franklin, IN 46131  
MSOP: 081-15797-00032  
Reviewer: ERG/YC  
Date: September 3, 2002**

**1. Emissions from the Aluminum Die Casting Process:**

**Clean Al Input**

**lbs/hr**

**3750** (Total for 2 machines)

Emission Factor (lbs/ton)	Pollutant					
	PM*	PM10*	SO2 NA	NO <sub>x</sub> NA	VOC NA	CO NA
Potential to Emit before Control (lbs/hr)	0.08	0.08				
Potential to Emit before Control (tons/yr)	0.33	0.33	-	-	-	-

\* Assume all the PM emissions are PM10 emissions.

**Methodology**

Emission Factors are from FIRE Version 6.23, SCC 3-04-004-09 (Lead Casting), which is the only available emission factor for pure metal casting process in FIRE. In addition, the die casting process is an enclosed molding process. Therefore, the particulate emissions from the die casting process are limited. There is not pouring and cooling casting processes involved with the die casting process. Therefore, the emissions factors for secondary aluminum production facilities are not suitable here.

PTE (lbs/hr) = Al Input (lbs/hr) x 1 ton/2000 lbs x Emission Factor (lbs/ton)

PTE (tons/yr) = Al Input (lbs/hr) x 1 ton/2000 lbs x Emission Factor (lbs/ton) x 8760 hr/yr x 1 ton/2000 lbs

**2. Emissions from the Unmolding Process:**

Max. Graphite Usage: 10 lbs/day/machine  
Control Device: 6 Baghouses

The release agent on the mold surfaces is consisted of graphite and water. Assume all the graphite used are PM/PM10 emissions:

**The Potential to Emit PM/PM10 before Control =**

10 lbs/day/machine x 365 day/yr x 2 machines x 1 tons/2000 lbs = **3.65 tons/yr**

**3. Total Emissions from the Die Casting Machines:**

**The Potential to Emit PM/PM10 before Control**

= (Emissions from the Die Casting Process) + (Emissions from the Unmolding Process)

= 0.33 tons/yr + 3.65 tons/yr = **3.98 tons/yr**

**Appendix A: Emission Calculations  
 Natural Gas Combustion  
 (MMBtu/hr < 100)  
 From All Other Natural Gas Combustion Units**

**Company Name: Casting Technology Company  
 Address City IN Zip: 1450 Musicland Drive, Franklin, IN 46131  
 MSOP: 081-15797-00032  
 Reviewer: ERG/YC  
 Date: September 3, 2002**

Heat Input Capacity  
 MMBtu/hr

Potential Throughput  
 MMCF/yr

**50.97** (24 units combined)

446.5

	Pollutant					
Emission Factor in lb/MMCF	PM*	PM10*	SO <sub>2</sub>	**NO <sub>x</sub>	VOC	CO
	7.6	7.6	0.6	100	5.5	84.0
<b>Potential Emission in tons/yr</b>	<b>1.70</b>	<b>1.70</b>	<b>0.13</b>	<b>22.32</b>	<b>1.23</b>	<b>18.75</b>

\*PM and PM10 emission factors are condensable and filterable PM10 combined.

\*\*Emission Factors for NO<sub>x</sub>: Uncontrolled = 100, Low NO<sub>x</sub> Burner = 50, Low NO<sub>x</sub> 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 from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

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