



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: December 14, 2007
RE: Accurate Castings, Inc. / 091-25490-00046
FROM: Matthew Stuckey, Deputy Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER-AM.dot12/3/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

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Commissioner

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Mr. Earl Miller
Accurate Casting, Inc.
118 Koomler Drive,
La Porte, Indiana 46350

December 14, 2007

Re: 091-25490-00046
Administrative Amendment to
FESOP Permit No. 091-6483-00046

Dear Mr. Miller:

Accurate Casting, Inc., was issued a FESOP No. 091-6483-00046 on March 19, 1997, for a stationary gray/ductile iron foundry operation located at 118 Koomler Drive, La Porte, Indiana. On November 1, 2007, the Office of Air Quality (OAQ) received a request for the modification of the iron and sand handling system.

This modification is to replace an existing iron and sand handling system. The entire source will continue to limit emissions to less than the Part 70 major source thresholds per twelve (12) consecutive month period, rendering the requirements of 326 IAC 2-7 not applicable. The replacement of this unit will not cause the source's potential to emit to be greater than the threshold levels specified in 326 IAC 2-2 or 326 IAC 2-3. Therefore, the modification of the iron and sand handling system is considered an administrative amendment pursuant to 326 IAC 2-8-10(13).

The changes listed below have been made to FESOP Operating Permit No.091-6483-00046. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

Change 1 The iron and sand handling operation has been added to Sections A.2 and D.1 and all the conditions in Section D.1 have been revised to make the conditions federally enforceable.

A.2 Emission Units and Pollution Control Summary

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

- (j) One (1) iron and sand handling operation, to be constructed in 2007, with maximum capacity of 2.0 tons of sand per hour, controlled by a dust collector, identified as A8.

SECTION D.1 FACILITY OPERATION CONDITIONS

- (a) Two (2) electric induction furnaces (iron), known as Furn 1 and Furn 2, capacity: 2,000 pounds per hour each.
(b) One (1) electric induction furnace (brass), known as Furn 3, equipped with a baghouse, known as A3, for PM control, capacity: 1,700 pounds per hour.

- (c) Fifteen (15) molding machines, known as MOLPH & MOL01 - MOL014, exhausted through stacks H, S and G and general ventilation exhausts J1, J2 and T.
- (d) Twelve (12) core machines, known as COR01 - COR10, CORA1 & CORA2, exhausted through stacks U and V and general ventilation exhausts W1 and W2.
- (e) Six (6) sand storage silos, known as Sand 1 (four silos), Sand 2 and Sand 3.
- (f) One (1) shot blast machine, known as WHE01, equipped with a baghouse known as A2, for PM control.
- (g) One (1) rotary drum, known as DIDI1.
- (h) Two (2) metal cooling tunnels, exhausted through stacks C, X1 - X3, R, E, D and I, M & L.
- (i) One (1) baghouse dust collector, known as A4, for PM control of PM emissions due to loadout from iron shakeout only.
- (j) One (1) iron and sand handling operation, to be constructed in 2007, with maximum capacity of 2.0 tons of sand per hour, controlled by a dust collector, identified as A8.**

Emissions Limitations [326 IAC 2-8-4(1)]

~~D.1.1 Particulate Matter~~

~~Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter emissions from each of the following foundry processes shall not exceed the specified emission rates specified in the following table:~~

<u>Process</u>	<u>PM Limit</u> (pounds per hour)
Scrap and Charge Handling	8.27
Mold and Core Making	9.08
Iron Melting	6.52
Iron Pouring	6.52
Iron Shakeout	6.52
Iron Furnace Magnesium Treatment	6.52
Iron Cleaning & Finishing	4.63
Iron Sand Handling	7.16
Brass Melting	3.68
Brass Pouring	3.68
Brass Shakeout	3.68
Brass Sand Handling	4.05

D.1.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e), (Particulate Emission Limitations for Manufacturing

Processes), the allowable particulate matter emissions from the emission units, shall not exceed the emission limit shown in the table below:

Operation	PM Limits (lb/hr)
Scrap and Charge Handling	8.27
Mold and Core making	9.08
Iron Melting	6.52
Iron Pouring	6.52
Iron Shakeout	6.52
Iron Furnace Magnesium Treatment	6.52
Iron Cleaning and Finishing	4.63
Iron and Sand Handling	7.16
Brass Melting	3.68
Brass Pouring	3.68
Brass Shakeout	3.68
Brass Sand Handling	4.05

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

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

Where:

**P = process weight in tons/hr; and
E = rate of emission in pounds per hour.**

~~D.1.2 PM₁₀~~

- ~~(a) The PM₁₀ emissions from the entire foundry source shall not exceed 7.92 tons per month. Therefore, the requirements of 326 IAC 2-7 do not apply.~~
- ~~(b) The process weight of iron produced by two (2) furnaces shall be limited to 48 tons per day.~~
- ~~(c) The process weight of brass produced by the one (1) furnace shall be limited to 20.4 tons per day.~~

D.1.2 Part 70 Minor Limit [326 IAC 2-8-4]

The permittee shall comply with the following:

- (a) The amount of iron produced by two (2) furnaces, identified as furn 1 and furn 2 shall be less than 17520 tons per twelve (12) consecutive month period with compliance determined at the end of each month.**
- (b) The total PM₁₀ emissions from the two (2) furnaces shall not exceed 0.86 pounds per ton of metal produced.**

- (c) **The amount of brass produced by one (1) furnace, identified as furn 3 shall be less than 7446 tons per twelve (12) consecutive month period with compliance determined at the end of each month.**
- (d) **The PM₁₀ emissions from the one (1) furnace, identified as furn 3 shall not exceed 0.86 pounds per ton of metal produced.**

Compliance with the above limits combined with potential emissions from other emission units will limit sourcewide PM₁₀ emissions to less than 100 tons per year, and will render 326 IAC 2-7 not applicable to this source.

Compliance Determination Requirements

~~D.1.6 Preventive Maintenance [326 IAC 2-8-4(9)]~~

~~A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the facilities covered by Section D.1.~~

D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

D.1.4 Particulate Matter (PM)

- (a) **In order to comply with Conditions D.1.1 and D.1.2, the baghouse for PM control shall be in operation at all times when the billet shot blasting process is in operation.**
- (b) **In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also included the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.**

~~Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]~~

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

~~D.1.5 Daily Visible Emissions Notations~~

~~Daily visible emission notations of the foundry stack exhausts, shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.~~

D.1.5 Visible Emissions Notations

- (a) **Visible emission notations of the electric induction furnace, identified as furn3, shot blasting machine, iron and sand handling, fifteen (15) molding machines, twelve (12) core machines and two (2) metal cooling tunnels operations stack exhausts shall be performed once per day during normal daylight operations. A**

trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.**
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.**
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.**
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.**

~~D.1.3 Pressure Readings~~

~~The Permittee shall take readings of the total static pressure drop across all baghouses controlling the brass melting (A3) and the shot blasting (A2) at least once per day when the foundry is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the two (2) baghouses shall be maintained within the range of 1.0 and 4.5 inches of water for A3 and 1.0 and 5.0 inches of water for A2, or ranges that can be established during stack tests. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions of the above mentioned ranges for any one reading.~~

.....

D.1.6 Parametric Monitoring

The Permittee shall record the pressure drop across the electric induction furnace (Brass melting), shot blasting and the iron and sand handling baghouses used in conjunction with the electric induction furnace (Brass melting), shot blasting and the iron and sand handling operations at least once per day when the electric induction furnace (Brass melting), shot blasting and the iron and sand handling are in operation. When for any one reading, the pressure drop across the baghouses are outside the normal range of 1.0 and 5.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions of the above mentioned ranges for any one reading.

The instrument used for determining the pressure shall comply with condition C.11 - Pressure Gauge Specifications, be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

~~D.1.4 Broken Bag or Failure Detection~~

~~In the event that bag failure has been observed:~~

- ~~(a) The affected compartments shall be shut down immediately until the units have been replaced.~~
- ~~(b) Based upon the findings of the inspection, any additional corrective actions shall be devised within eight (8) hours of discovery and shall include a timetable for completion.~~

D.1.7 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced.
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit.

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

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

~~D.1.7 Operational Parameters~~

~~The Permittee shall maintain records at the stationary source of the following values:~~

- ~~(a) Weekly inspection of bag cleaning mechanisms;~~
- ~~(b) Monthly inspection of fan condition; and~~
- ~~(c) Daily visible observations.~~

D.1.8 Record Keeping Requirements

- (a) To document compliance with Condition D.1.5, the Permittee shall maintain daily records of the visible emission notations of the electric induction furnace, identified as furn3, shot blasting machine, iron and sand handling fifteen (15) molding machines, twelve (12) core machines and two (2) metal cooling tunnels operations stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (e.g. the process did not operate that day).
- (b) To document compliance with Condition D.1.6 the Permittee shall maintain the daily records of the pressure drop across the baghouse controlling the electric induction furnace (brass melting) shot blasting and the iron and sand handling operations. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g. the process did not operate that day).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

~~D.1.8 Quarterly Reporting~~

~~A quarterly summary to document compliance with operation condition number D.1.2(b) (c) shall be submitted to the addresses listed in Section C - General Reporting Requirements, using the enclosed forms or their equivalent, within thirty (30) days after the end of the quarter being reported.~~

D.1.9 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the

quarter being reported. The report submitted by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

Change 2 IDEM has determined that it is not necessary to include the name or title of the responsible official in Section A.1 of the permit.

A.1 General Information

The Permittee owns and operates a metal foundry source.

~~Responsible Official: — Jack Hiler~~

Change 3 Two FESOP quarterly report forms have been included in the amendment to demonstrate compliance with Condition D.1.2

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

FESOP Quarterly Report

Source Name: Acurate Casting, Inc
Source Address: 118 Koomler Drive, La Porte Indiana 46350
Mailing Address: P. O Box 639 La Porte, Indana 46352
FESOP Permit No.: F091-6483-00046
Facility: Two Furnaces identified as furn 1 and furn 2
Parameter: PM₁₀
Limit: Total PM₁₀ emission shall be less than 17520 tons per twelve consecutive month period.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Acurate Casting, Inc
Source Address: 118 Koomler Drive, La Porte Indiana 46350
Mailing Address: P. O Box 639 La Porte, Indiana 46352
FESOP Permit No.: F091-6483-00046
Facility: One Furnace, identified as furn 3
Parameter: PM₁₀
Limit: Total PM₁₀ emission shall be less than 7446 tons per twelve consecutive month period.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Josiah Balogun, of my staff, at 317-234-5257 or 1-800-451-6027, and ask for extension 4-5257.

Sincerely,
Original signed by:

Matt Stuckey, Deputy Branch Chief
Permits Branch
Office of Air Quality

MS/JB

cc: File – La Porte County
La Porte County Health Department
Air Compliance Section
IDEM Northwest Regional Office
Compliance Data Section
Permits Administration and Development