



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL
SHELBY COUNTY
Application No: 05-12593**

CERTIFIED MAIL

Y	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 6/5/2003

Honda of America Mfg Inc
Paul Huwer
12500 MERANDA RD
ANNA, OH 45302-9699

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

SWDO



Permit To Install
Terms and Conditions

Issue Date: 6/5/2003
Effective Date: 6/5/2003

FINAL PERMIT TO INSTALL 05-12593

Application Number: 05-12593
APS Premise Number: 0575000174
Permit Fee: **\$400**
Name of Facility: Honda of America Mfg Inc
Person to Contact: Paul Huwer
Address: 12500 MERANDA RD
ANNA, OH 45302-9699

Location of proposed air contaminant source(s) [emissions unit(s)]:
12500 Meranda Rd
Anna, Ohio

Description of proposed emissions unit(s):
Ferrous casting disc core machine.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is

granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

12. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

B. State Only Enforceable Permit To Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

4. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

6. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

8. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	0.76
OC	6.25

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

The particulate emissions (PE) and/or particulate matter <10 micron (PM-10) from fabric filter baghouse #5 serving emissions unit P087 shall not exceed 0.005 grain of PE per actual cubic foot of the total exhaust gases.

The permittee reserves the right to direct the particulate and/or particulate matter <10 micron emissions from any other existing or new emissions units (once permitted and thereby considered existing) to these fabric filters with the understanding that emissions will not exceed 0.005 grain per actual cubic foot of the total exhaust gases and/or will not exceed any permitted allowable lb/hr stack and/or individual emission unit's permitted allowable emission limitation.

This right is allowed as long as the permittee does not trigger the modification definition pursuant to Ohio Administrative Code (OAC) rule 3745-31-01 and submits information to the Ohio EPA within thirty days after the change(s) documenting the change(s). This information would include, but not limited to, the following: a description of which emissions units were redirected to which bag house, and calculations supporting the permittee's contention that the redirection of existing emissions units would not trigger the modification definition pursuant to OAC rule 3745-31-01.

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P087 - Ferrous Casting Disc Core Machine with baghouse and/or wet scrubber	OAC rule 3745-31-05(A)(3)	0.21 lb of particulate emissions (PE) /hr- (stack emissions) 0.001 lb of particulate emissions (PE)/hr- (fugitive emissions) 1.82 lbs of organic compound (OC)/hr- (stack emissions)- 0.008 lb of organic compound (OC) /hr- (fugitive emissions) 40.0 lbs of photochemically reactive organic compound (OC)/day-(fugitive and stack emissions combined) 0.005 grain of PE/dscf from the baghouse stack. 0% opacity, as a six minute average, from the baghouse stack 20 % opacity, as a three minute average, from the fugitive dust source
	OAC rule 3745-31-05(D)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D). 0.76 ton of PE per rolling 12 months - (stack emissions)

OAC rule 3745-17-11(B)(1)	0.03 ton of OC per year- (fugitive emissions) 0.003 ton PE per year- (fugitive emissions) 6.25 tons of OC per rolling 12 months- (stack emissions) See sections II.6 & 7
OAC rule 3745-17-07(A)(1)	The PE emission limitation specified by this rule is less stringent than the PE emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(B)(1)	The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3). This emissions unit is exempt from the visible particulate limitation specified in OAC rule 3745-17-07(B)(1), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not a fugitive dust emissions unit located within the geographical area specified in Appendix A of OAC rule 3745-17-08.
OAC rule 3745-21-07(G)(2)	The OC limitation specified by this rule is less stringent than the OC limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a** Best Available Technology (BAT) has been determined to be the use of a baghouse and wet scrubber for controlling the emission from this emissions unit.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation except for the first 45 days following a change of a least 50% of the fabric bags, when the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the bag house is in operation.
2. The permittee shall operate a wet scrubber only when the binder system uses triethylamine (TEA) to complete the reaction. This process is known as TEA Cured.
3. The pressure drop across the scrubber shall be maintained at a value of not less than 0.5 inches of water while the emissions unit is in operation and TEA Cured.
4. The scrubber water flow rate shall be maintained at a value of not less than 22 gallons per minute while the emissions unit is in operation and TEA Cured.
5. The pH of the scrubber liquor shall be maintained at or below 4.5, where 4.5 is the maximum pH level while the emissions unit is in operation and TEA Cured.
6. The maximum sand throughput for the FC Disc Core Machine shall not exceed 1.33 tons per hour and 5,100 tons per rolling, 12 months.

(No hourly recordkeeping required. 1.33 tons of sand per hour represents the maximum designed capacity of the equipment.)

In order to ensure federal enforceability, for the first 12 calendar months of operation, Honda of America shall not exceed the following sand throughput for the specific time period.

<u>Month</u>	<u>Total Allowable Tons of Sand Throughput</u>
1	425
1-2	850
1-3	1275
1-4	1700
1-5	2125
1-6	2550
1-7	2975
1-8	3400
1-9	3825
1-10	4250
1-11	4675
1-12	5100

- 7. The maximum annual operating hours for P087 shall not exceed 7,200 hours per year, based upon a rolling, 12 month summation of the operating hours.

In order to ensure federal enforceability, for the first 12 calendar months of operation, Honda of America shall not exceed the following hours of operation for this emissions unit for the specific time period.

<u>Month</u>	<u>Total Allowable Hours of Operation</u>
1	600
1-2	1200
1-3	1800
1-4	2400
1-5	3000
1-6	3600
1-7	4200
1-8	4800
1-9	5400
1-10	6000
1-11	6600
1-12	7200

III. Monitoring and/or Recordkeeping Requirements

- 1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.
- 2. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the wet scrubber , the scrubber water flow, and record the pH of the scrubber liquor while the emissions unit is in operation and TEA Cured. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
- 3. The permittee shall collect and record the following information each operating day while the emissions unit is in operation and TEA Cured:
 - a. the pressure drop across the scrubber, in inches of water;
 - b. the scrubber water flow rate, in gallons per minute;
 - c. the pH of the scrubber liquor; and

- d. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
4. The permittee shall collect and record the following information each day the emission unit is in operation and when using material not exempted in Ohio Administrative Code (OAC) rule 3745-21-07 (G)(9):
 - a. for each day during which a photochemically reactive material is employed, the calculated number of gallons of each mold release agent.
 - b. for each day during which a photochemically reactive material is employed, the calculated total organic compound emission rate for all mold release agents in pounds per day.
 - c. for each day during which a photochemically reactive material is employed, the total number of hours the emissions unit was in operation.
 5. The permittee shall maintain monthly records of the following information:
 - a. The total sand throughput for each month.
 - b. The rolling, 12-month summation of the sand throughput.
 6. The permittee shall maintain monthly records of the following information:
 - a. The total hours of operation for this emissions unit for each month.
 - b. The rolling, 12-month summation of the hours of operation for this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the emissions unit was in operation and the pressure drop across the baghouse did not comply with the allowable range specified in the permit.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the emissions unit was in operation and the following wet scrubber parameters were not maintained at or above the required levels while the emissions unit is in operation and TEA Cured:
 - a. The static pressure drop across the scrubber.
 - b. The scrubber water flow rate.
 - c. The pH of the scrubber liquor.

3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month sand throughput limitation.
4. The permittee shall submit deviation (excursion) reports which identify the following information:
 - a. for the days during which a photochemically reactive material was employed, an identification of each day during which the daily organic compound emissions from the mold release agent exceeded 40 pounds per day.
5. These reports, as denoted in terms A.IV.1 and A.IV.2, are due by the date described in Part 1-General Terms and Conditions of the permit under section (A)(1).
6. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month hours of operation limitation.

V. Testing Requirements

Compliance with the emission limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

1. Emission Limitation:

0.21 lb of particulate emissions (PE)/hour-(stack emissions)

Compliance shall be assumed as long the both the 0.005 gr./dscf PE limit from the baghouse stack is met based on the following testing:

The permittee shall conduct, or have conducted, emission testing for the bag house in accordance with the following requirements:

- a. The emission testing shall be conducted within 6 months of project completion and mass production start-up.
- b. The emissions testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

<u>Pollutant</u>	<u>Test Method</u>	<u>Location</u>
Particulate (PE)	Method 1-4 and 5**	40 <u>CFR</u> Part 60, Appendix A

**Note: Alternative US EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit(s) operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Southwest District Office's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit(s) and the testing procedures provide a valid characterization of the emissions from the emissions unit(s) and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office within 30 days following the completion of the test(s).

2. Emission Limitation:

0.756 tons of PE per rolling 12 months-(stack emissions).

Applicable Compliance Method:

Compliance shall be assumed as long the 0.005 gr./dscf PE limit from the baghouse stack is met. This is based both on the operating requirements in term A.II. and the following calculation:

$$(MAER) \times (MAH) \times (CONV) = 0.756 \text{ tons of PE per rolling 12 months-(stack emissions)}$$

where

MAER = the Maximum Allowable Emission Rate = 0.21 lb. of PE / hour - from the stack (stack emissions)

MAH = the Maximum allowable Annual Hours of operation = 7200 operating hours

CONV = conversion factor = (1 ton/2000 lbs.)

3. Emission Limitation:

0.001 lb of PE/hr- (fugitive emissions)

Applicable Compliance Method:

$$(HPWR) \times (UEF) \times (1 - CEF) \times (1 - BCE) = 0.001 \text{ lb of PE/hr}$$

Where:

HPWR = hourly process weight rate (1.33 tons sand/hour)

UEF = Fugitive Emission Factor (3.6 lbs. PE/ton of sand)(Fire 6.23 ID30400350)

CEF = capture efficiency (0.999)

BCE = Building Capture Efficiency (70% - Reference: April 10,1998 Letter to Ironton Iron Inc. from Stephen Giles-Director of Portsmouth Local Air Agency

4. Emission Limitation:

0.003 ton of PE per year-(fugitive emissions)

Applicable Compliance Method:

$(APR) \times (UEF) \times (1 - CEF) \times (1 - BCE) = 0.003 \text{ ton of PE/ year- (fugitive emissions)}$

where

APR= Annual Production Rate (5,100 tons sand per year)

UEF= Uncontrolled Emission Factor (3.6 lbs PE/Ton Sand)(Fire 6.23 SCC ID 30400350)

CEF = capture efficiency (0.999)

BCE = Building Capture Efficiency (70% - Reference: April 10,1998 Letter to Ironton Iron Inc. from Stephen Giles-Director of Portsmouth Local Air Agency

5. Emission Limitation:

1.82 lbs of organic compounds (OC)/hr-(stack emissions)

Applicable Compliance Method:

$CEB + CEC + CEPS = 1.82 \text{ lb of OC/hr-(stack emissions)}$

where

CEB = the stack emission rate from the binder (0.17 lb of OC/hr.)

CEC = the stack emission rate from the triethylamine (TEA) catalyst (0.30 lb of OC/hr.)

CEPS = the stack emission rate from the parting spray (1.35 lbs of OC/hr.)

where

$CEB = (TSH)(BEF)(CE) = 0.17 \text{ lb of OC/hr.}$

TSH= Tons of sand per hour (1.33 tons of sand/hr.)

BEF= Binder Emission Factor (0.127 lb of OC/ton sand, OCMA EPA VOC study)

CE = capture Efficiency (0.999)

where

$CEC = (PCH) \times (CE) \times (1 - CEF) = 0.30 \text{ lb of OC/hr}$

PCH = Pounds of Triethylamine (TEA) Catalyst per hour (6.0 lbs/hr)

CE = Capture Efficiency (0.999)

CEF = Control Efficiency of the Scrubber (95%)

where

CEPS=(GPS) x (OCC) x (CE) = 1.35 lbs of OC/hr

GPS= Gallons of Parting Spray per hour (0.2 gal/hr)**

OCC= Volatile Organic Compound Content (MSDS data indicates 6.74 lbs/gallon)

CE = Capture Efficiency (0.999)

**This limit represents the maximum capacity of the FC Disc Core Machine. Since this limit represents the maximum designed throughput capacity of this source, no additional compliance determination is required.

6. Emission Limitation:

0.008 lb of OC/hr-(fugitive emissions)

Applicable Compliance Method:

UEB + UEC + UEPS = 0.008 lb of OC/hr-(fugitive emissions)

where

UEB = the fugitive emission rate from the binder (0.0002 lb of OC/hr.)

UEC = the fugitive emission rate from the triethylamine (TEA) catalyst (0.006 lb of OC/hr.)

UEPS = the uncontrolled emission rate from the parting spray (0.001 lb of OC/hr.)

where

UEB= (TSH) x (BEF) x (1-CE) = 0.0002 lb of OC/hr

TSH= tons of sand per hour (1.33 tons of sand/hr)

BEF= Binder Emission Factor (0.127 lb of OC/ton sand, OCMA EPA VOC study)

CE = capture Efficiency (0.999)

where

UEC = (PCH) x (1-CE) = 0.006 lb of OC/hr

PCH = Pounds of Triethylamine (TEA) Catalyst per hour (6.0 lbs/hr)

CE = Capture Efficiency (0.999)

where

UEPS = (GPS) x (OCC) x (1-CE)= 0.001 lb of OC/hr

GPS= Gallons of Parting Spray per hour (0.2 gallons/hr)**

OCC = Volatile Organic Compound Content (MSDS Indicates 6.74 lbs/gallon)

CE = Capture Efficiency (0.999)

**This limit represents the maximum capacity of the FC Disc Core Machine. Since this limit represents the maximum designed throughput capacity of this source, no additional compliance determination is required.

7. Emission Limitation:

6.25 tons of OC per rolling 12 months-(stack emissions)

Applicable Compliance Method:

CAEB + CAEC + CEPS = 6.25 tons of OC/yr-(stack emissions)

where

CAEB = the stack annual emission rate from the binder (0.32 ton of OC/yr)

CAEC = the stack annual emission rate from the triethylamine (TEA) catalyst (1.08 tons of OC/yr)

CAEPS = the stack annual emission rate from the parting spray (4.85 tons of OC/yr)

where

CAEB= (TSY) x (BEF) x (CE) x (CONV)= 0.32 tons of OC/yr

TSY= Tons of sand per year (5,100 tons of sand/yr)

BEF= Binder Emission Factor (0.127 lb of OC/ton sand, OCMA EPA VOC study)

CE = capture Efficiency (0.999)

CONV = conversion factor (1 ton/2000 lbs.)

where

CAEC = (PCH) x (CE) x (1-CEF) = 1.08 tons of OC/yr

TCY = Tons of Triethylamine (TEA) Catalyst per year (21.6 tons/yr)

CE = Capture Efficiency (0.999)

CEF = Control Efficiency of the Scrubber (95%)

where

CAEPS=(GPS) x (OCC) x (CE) x (CONV)= 4.85 tons of OC/yr

GPY= Gallons of Parting Spray per year (1,440 gal/yr)

OCC= Volatile Organic Compound Content (MSDS data indicates 6.74 lbs/gallon)

CE = Capture Efficiency (0.999)

CONV = conversion factor (1 ton/2000 lbs)

8. Emission Limitation:

0.03 ton of OC per year-(fugitive emissions)

Applicable Compliance Method:

$UAEB + UAEC + UAEPS = 0.03 \text{ lb of OC/hr-(fugitive emissions)}$

where

UAEB= the fugitive annual emission rate from the binder (0.0003 ton of OC/yr)

UAEC= the fugitive annual emission rate from the triethylamine(TEA) catalyst (0.02 ton of OC/yr)

UAEPS = the uncontrolled annual emission rate from the parting spray (0.005 ton of OC/yr)

where

$UAEB = (TSY) \times (BEF) \times (1-CE) \times (CONV) = 0.0003 \text{ ton of OC/yr}$

TSY= tons of sand per year (5,100 tons of sand/yr)

BEF= Binder Emission Factor (0.127 lb of OC/ton sand, OCMA EPA VOC study)

CE = capture Efficiency (0.999)

CONV = conversion factor (1 ton/2000 lbs)

where

$UAEC = (TCY) \times (1-CE) = 0.02 \text{ ton of OC/yr}$

TCY = Tons of Triethylamine (TEA) Catalyst per year (21.6 tons/yr)

CE = Capture Efficiency (0.999)

where

$UAEPS = (GPY) \times (OCC) \times (1-CE) \times (CONV) = 0.005 \text{ lb of OC/hr.}$

GPY= Gallons of Parting Spray per year (1,440 gallons/yr)

OCC = Volatile Organic Compound Content (MSDS Indicates 6.74 lbs/gallon)

CE = Capture Efficiency (0.999)

CONV = conversion factor (1 ton/2000 lbs)

9. Emission Limitation:

0% opacity, as a six- minute average, from the stack

Applicable Compliance Method:

Compliance shall be determined according to test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR Part 60.

10. Emission Limitation:

20% opacity, as a three-minute average, from the fugitive dust source

Applicable Compliance Method:

40 CFR Part 60, Method 9, with opacity readings taken from any exit of the building.

11. Emission Limitation:

1.82 pounds OC/hr when using photochemically reactive materials.
40 pounds per day when using photochemically reactive materials

Applicable Compliance Method

The permittee shall maintain documentation on whether or not each mold release agent used in this emissions unit is photochemically reactive.

Compliance with OAC 3745-21-07(G)(2) shall be determined through daily recordkeeping of the calculated use of mold release agents, the OC content of each material used, and the hours of operation of this emissions unit. Formulation data from the manufacturer may be used to determine the organic compound content of the mold release agents to be used in the calculation of emissions.

Hourly Emissions = See Section IV #5 & #6

Daily Emissions

40 pounds of photochemically reactive materials = $GPD \times OCC \div OH$

GPD = Gallons of Parting Spray per Day

OCC = Volatile Organic Compound Content (Current MSDS Indicates 6.74 lbs/gallon)

OH = Operating Hours

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P087 - Ferrous Casting Disc Core Machine with fabric filter	OAC rule 3745-31-05	Compliance with OEPA's Air Toxics Policy

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P087) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: triethylamine

TLV (mg/m3): 1 ppm

Maximum Hourly Emission Rate (lbs/hr): 0.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 17.54

MAGLC (ug/m3): 98.54

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

2. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the “Air Toxic Policy:”
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the “Air Toxic Policy”; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the “Air Toxic Policy” for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None