State of Ohio Environmental Protection Agency

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
SHELBY COUNTY

Street Address: Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329 Mailing Address: Lazarus Gov. Center

Application No: 05-10346

DATE: 2/7/2002

Honda of America Mfg Inc
Paul Huwer
12500 MERANDA RD
ANNA, OH 453029699

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,

Thomas G. Rigo
Field Operations and Permit Section
Division of Air Pollution Control

CC: **USEPA** **SWDO**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install

FINAL PERMIT TO INSTALL 05-10346

Application Number:	05-10346
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 453029699

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

Description of proposed emissions unit(s):
Modification to core-making machine No 3.

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 Record keeping 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 record keeping 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 <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and record keeping 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.10 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, record keeping, 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 thirty (30) 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 Related to Monitoring and Record keeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or record keeping 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 record keeping 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

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

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

Pollutant	Tons Per Year
PE	5.241
PM_{10}	5.241
OC	2.193
SO_x	10.13

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

The particulate emissions and/or particulate matter <10 micron from fabric filter BH-10 serving emissions units P015, P020, P901,and P902 shall not exceed 0.010 grain per actual cubic foot of the total exhaust gases.

The particulate emissions and/or particulate matter <10 micron from fabric filter BH-20 serving emissions units P015, P017, P901,and P902 shall not exceed 0.010 grain 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 0.010 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 baghouse, and calculations supporting the permittee's contention that the redirection of existing emissions units would not trigger the modification definition pursuant to Ohio Administrative Code (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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P015-Core Making Machine #3 (existing)	OAC rule 3745-31-05(A)(3)	1.19 lbs PE/hr. - stack 5.21 tons PE/yr. - stack 0.007 lb PE/hr. - fugitive 0.031 ton PE/yr. - fugitive 0.441 lb OC/hour - stack 1.926 tons OC/year - stack 0.061 lb OC/hour - fugitive 0.267 ton OC/year - fugitive 1.15 lbs SO_x/hr. - stack 5.05 tons SO_x/hr. - stack 1.16 lbs SO_x/hr. - fugitive 5.08 tons SO_x/yr. - fugitive 0.010 gr./dscf 0% opacity, as a six minute average, from the stack 20 % opacity, as a three minute average, from the fugitive dust source

2. Additional Terms and Conditions

2.a Compliance with OAC rule 3745-31-05 shall be demonstrated by the use of a baghouse, scrubber, and compliance with the limits in term A.I.1.

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 baghouse is in operation.

2. The pressure drop across the scrubber shall be maintained at a value of not less than 0.5 inches of water at all times while the emissions unit is in operation.

3. The scrubber water flow rate shall be continuously maintained at a value of not less than 22 gallons per minute at all times while the emissions unit is in operation.

4. When the sand castings cores are PUCB-TEA cured, the pH of the scrubber liquor shall be maintained at or below 4.5, where 4.5 is the maximum pH level at all times while the emissions unit is in operation.

5. When the sand castings cores are SO_x cured, the pH of the scrubber liquor shall be maintained at or above 7.5, where 7.5 is the minimum pH level at all times while the emissions unit is in operation.

6. The emissions of sulfur oxides from this emissions unit shall not exceed 5.241 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

7. This is an existing source and the applicant has historical data demonstrating compliance with the rolling 12-month summation of the monthly emissions.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit(s) 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 monitor the static pressure drop across the scrubber , the scrubber water flow, and the pH of the scrubber liquor while the emissions unit is in operation. 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:

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.

d. The operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.

2. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the emission unit was in operation and the pressure drop across the baghouse did not comply with the allowable range specified in the permit.

3. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the emission unit was in operation and the following scrubber parameters were not maintained at or above the required levels:

a. The static pressure drop across the scrubber.

b. The scrubber water flow rate.

c. The pH of the scrubber liquor.

d. 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).

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

a. The emission testing shall be conducted 6 months prior to permit renewal.

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):

Pollutant	Test Method	Location
Particulate	Method 5	40 CFR Part 60, Appendix A

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 appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire date 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 appropriate Ohio EPA District Office or local air agency within 30 days following the completion of the test(s).

2. Emission Limitation:

5.21 tons of PE per year from the stack

Applicable Compliance Method:

(MAER)(MAH)(CONV)= 5.21 tons of PE per year

where

MAER= the maximum allowable emission rate (1.19 lbs PE/hr.)
MAH= the maximum annual hours of operation (8,760 hrs./yr.)
CONV= conversion factor (1 ton/2000 lbs)

3. Emission Limitation:

0.007 lb PE/hr of fugitive emissions

Applicable Compliance Method:

(MPWR) (CONV) (EF) (1 - CEF) = 0.007 lb PE/hr

Where:

MPWR = maximum process weight rate (2162 lbs Sand/hour)
CONV = conversion factor (1 ton/2000 pounds)
EF = emission factor (0.65 lb PE/ton of sand)
CEF = capture efficiency (0.99)

4. Emission Limitation:

0.031 ton of PE per year of fugitive emissions

Applicable Compliance Method:

(MAER)(MAH)(CONV)= 0.031 ton of PE per year of fugitive emissions

where

MAER= the maximum allowable emission rate (0.007 lb PE/hr.-fugitive)
MAH= the maximum annual hours of operation (8,760 hrs./yr.)
CONV= conversion factor (1 ton/2000 lbs.)

5. Emission Limitation:

0.441 lb OC/hr. From the stack.

Applicable Compliance Method:

[UEB + CEC + UEPS] [CEF] = 0.441 lb OC/hr. From the stack.

where

UEB= the uncontrolled emission rate from the binder (0.14 lb OC/hr.)
CEC= the controlled emission rate from the triethylamine (TEA) catalyst (0.297 lb OC/hr.)
UEPS= the uncontrolled emission rate from the parting spray (0.005 lb OC/hr.)
CEF = capture efficiency (0.99)

where

UEB = (PSH)(CONV)(EF)= 0.14 lb OC/hr.
PSH = pounds of sand per hour (2,162 lbs sand/hr)
CONV = conversion factor (1 ton/2000 lbs)
EF = emission factor (0.127 lb OC/ton sand, OCMA/ Ohio EPA OC study)

where

CEC = (PCH)(CE)(1-CEF)= 0.297 lb OC/hr.

PCH = pounds of triethylamine (TEA) catalyst per hour (6.0 lbs/hr.)
CE= one hundred percent of the triethylamine captured (99%)
CEF = the control efficiency of the scrubber (95%)

where

UEPS= (GPS)(OCC)= 0.005 lb OC/hr.
GPS = gallons of parting spray per hour (0.5 gallon of parting spray/hr.)
OCC = Organic compound content (0.01 pound OC/gallon)

6. Emission Limitation:

1.926 tons of OC per year from the stack

Applicable Compliance Method:

(MAER)(MAH)(CONV)= 1.926 tons of OC per year from the stack

where

MAER= the maximum allowable emission rate (0.441 lb OC/hr.)
MAH= the maximum annual hours of operation (8,760 hrs./yr.)
CONV= conversion factor (1 ton/2000 lbs.)

7. Emission Limitation:

0.061 lb OC/hr. Fugitive emissions.

Applicable Compliance Method:

[UEB + UEC + UEPS] [1 - CEF] = 0.061 lb OC/hr. Fugitive emissions.

where

UEB= the uncontrolled emission rate from the binder (0.14 lb OC/hr.)
UEC= the uncontrolled emission rate from the triethylamine (TEA) catalyst (6.0 lbs OC/hr.)
UEPS= the uncontrolled emission rate from the parting spray (0.005 lb OC/hr.)
CEF = capture efficiency (0.99)

where

UEB = (PSH)(CONV)(EF)= 0.14 lb OC/hr.
PSH = pounds of sand per hour (2,162 lbs sand/hr)
CONV = conversion factor (1 ton/2000 lbs)
EF = emission factor (0.127 lb OC/ton sand, OCMA/ Ohio EPA OC study)

where

UEC = (PCH) = 6.0 lbs OC/hr.

PCH = pounds of triethylamine (TEA) catalyst per hour (6.0 lbs/hr.)

where

UEPS= (GPS)(OCC)= 0.005 lb OC/hr.
GPS = gallons of parting spray per hour (0.5 gallon of parting spray/hr.)
OCC = Organic compound content (0.01 pound OC/gallon)

8. Emission Limitation:

0.267 ton of OC per year of fugitive emissions

Applicable Compliance Method:

(MAER)(MAH)(CONV)= 0.267 ton of OC per year of fugitive emissions

where

MAER= the maximum allowable emission rate (0.061 lb OC/hr.)
MAH= the maximum annual hours of operation (8,760 hrs./yr.)
CONV= conversion factor (1 ton/2000 lbs)

9. Emission Limitation:

1.15 lbs SO_x/hr. from the stack

Applicable Compliance Method:

(PCH)(1 - CEF) (CE) = 1.15 lbs SO_x/hr. from the stack

where

PCH = pounds of SO_x catalyst per hour (116 lbs/hr.)
CEF = control efficiency of scrubber (99%)
CE = capture efficiency (99%)

10. Emission Limitation:

5.05 tons SO_x/yr. from the stack

Applicable Compliance Method:

(MAER)(MAH)(CONV)= 5.05 tons SO_x/yr.from the stack

where

MAER= the maximum allowable emission rate (1.15 lbs SO_x/hr.)
MAH= the maximum annual hours of operation (8,760 hrs./yr.)
CONV= conversion factor (1 ton/2,000 lbs.)

11. Emission Limitation:

1.16 lbs SO_x/hr. Fugitive emissions.

Applicable Compliance Method:

(PCH) (1 - CE) = 1.16 lbs SO_x/hr. Fugitive emissions.

where

PCH = pounds of SO_x catalyst per hour (116 lbs/hr.)
CE = capture efficiency (99%)

12. Emission Limitation:

5.08 tons SO_x/yr. Fugitive emissions.

Applicable Compliance Method:

(MAER)(MAH)(CONV) = 5.08 tons SO_x/yr. Fugitive emissions.

where

MAER= the maximum allowable emission rate (1.16 lbs SO_x/hr.)
MAH= the maximum annual hours of operation (8,760 hrs./yr.)
CONV= conversion factor (1 ton/2,000 lbs.)

13. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20% opacity, as a six-minute

average.

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.

14. 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.

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P015-Core Making Machine #3 (existing)		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. Emission Limitation for Air Toxics:

The permit to install for this emissions unit (P015) 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/m^3): 4.1

Maximum Hourly Emission Rate (lbs/hr): 0.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 0.64

MAGLC (ug/m^3): 98.52

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 still 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.

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