



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
COSHOCOTON COUNTY**

**CERTIFIED MAIL**

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 06-07751**

**Fac ID: 0616010006**

**DATE: 7/7/2005**

Clow Water Systems Co  
Patrick Huth  
PO Box 6001 2266 South 6th St  
Coshocoton, OH 43812

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  
309 South Fourth Street, Room 222  
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA

SEDO



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**Permit To Install  
Terms and Conditions**

**Issue Date: 7/7/2005  
Effective Date: 7/7/2005**

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**FINAL PERMIT TO INSTALL 06-07751**

Application Number: 06-07751  
Facility ID: 0616010006  
Permit Fee: **\$3000**  
Name of Facility: Clow Water Systems Co  
Person to Contact: Patrick Huth  
Address: PO Box 6001 2266 South 6th St  
Coshocton, OH 43812

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**2266 South 6th St  
Coshocton, Ohio**

Description of proposed emissions unit(s):  
**Two phenolic urethane no bake mixers.**

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 (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.8 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 (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, 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. If this permit is for an emissions unit located at a Title V facility, then 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.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

## 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 re-issuance, or modification
- 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, 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 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

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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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

**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 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 and the State and by citizens (to the extent allowed by section 304 of the Act) 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 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.

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**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.

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### **13. Permit-To-Install**

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

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

### **1. Compliance Requirements**

The emissions unit(s) identified in this Permit 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 (i.e., postmarked) quarterly, 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.

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The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**4. Authorization To Install or Modify**

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit 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)**

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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. Construction Compliance Certification**

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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.

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8. **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., postmarked), 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	2.80
VOC	23.30

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**Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**

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

None

**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>
F005 - Large PUNB Mold/Core Making	OAC rule 3745-31-05(A)(3)	Fugitive particulate emissions shall not exceed 2.1 pounds per hour and 0.73 ton per year.
		There shall be no visible fugitive particulate emissions.
		Volatile organic compound emissions shall not exceed 32.4 pounds per hour.
	OAC rule 3745-31-05(C)	Total volatile organic compound emission from the mold/core release agent used in emission units F005 and F022 shall not exceed 8.50 pounds per hour and 1.43 tons per year.
	OAC rule 3745-17-08(B)	Volatile organic compound emissions shall not exceed 9.0 tons per year as a rolling 12-month summation.
	OAC rule 3745-21-07(G)	See A.I.2.a
		See A.I.2.b

## **2. Additional Terms and Conditions**

- 2.a** This facility is located in Coshocton County, which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions from this emissions unit are exempt from the fugitive dust control requirements and visible emission limitation established in OAC rules 3745-17-08(B) and 3745-17-07(B), respectively.
- 2.b** This emissions unit is exempt from the requirements of OAC rule 3745-21-07(G) pursuant to OAC rule 3745-21-07(G)(9)(i) [the use of a phenolic urethane no-bake resin binder system in foundry core-making and mold-making operations]. This exemption was adopted by the Director of Ohio EPA and became effective June 15, 1999. The US EPA has agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of US EPA approval of this rule as revision to the Ohio SIP for ozone.

## **II. Operational Restrictions**

1. The maximum annual throughput of this emissions unit shall not exceed 22,500 tons of sand per year, based on a rolling 12-month summation.

## **III. Monitoring and/or Record keeping Requirements**

1. The permittee shall perform daily checks, when the emissions unit is in operation, for any visible fugitive particulate emissions from the mixer and/or the day bin vent. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. The color of the emissions;
  - b. The total duration of any visible emission incident; and
  - c. Any corrective actions taken to eliminate the visible emissions.
2. The permittee shall maintain monthly records of the following information:
  - a. The tons of sand used;
  - b. The total volatile organic compound emissions, in tons, calculated by multiplying the tons of sand used by 1.44 pounds of volatile organic compound per ton of sand used obtained from the Ashland Data based on Ohio Casting Metal Association weight loss method.;

- c. The rolling, 12-month summation of volatile organic compound emissions, in tons (i.e., the throughput for the current month added to the throughput for the previous 11 calendar months); and
  - d. The rolling, 12-month summation of sand throughput, in tons (i.e., the throughput for the current month added to the throughput for the previous 11 calendar months).
- 3.** The permittee shall maintain monthly records of the following information for mold/core release agent used in emission units F005 and F022, combined:

- a. The total pounds used ;
- b. The monthly volatile organic compound emission rate, in tons, calculated by multiplying the pounds of mold/core release agent used by the emission factor of 0.85 pound of volatile organic compound emissions per pound of mold/core release agent used obtained from the Refcopart 8000 MSDS; and
- c. The year to date volatile organic compound emission rate based on the summation of the monthly volatile organic compound emissions, in tons.

#### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the mixer and/or the day bin vent and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall notify the Ohio EPA, Southeast District Office of any monthly record showing an exceedance of the rolling, 12-month throughput limitations specified in section A.II.1. A copy of such record shall be sent to the Ohio EPA, Southeast District Office within 30 days following the end of the calendar month.
3. The permittee shall notify the Ohio EPA, Southeast District Office of any yearly record showing an exceedance of the annual mold/core release agent emission limitation specified in section A.I.1. A copy of such record shall be sent to the Ohio EPA, Southeast District Office within 30 days following the end of the calendar year.

#### V. Testing Requirements

1. Compliance with the emission limitation in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation:  
Fugitive particulate emissions shall not exceed 2.1 pounds per hour and 0.73 ton per year.

Applicable Compliance Method:

Compliance shall be demonstrated using the following equations :

**Bin vent exhaust**

0.03 grain per dry standard cubic foot X 500 actual cubic feet per minute X 60 minutes per hour X 1 pound per 7,000 grains X 70% settling factor(exhaust inside of building) = 0.04 pound per hour

0.04 pounds per hour X 8,760 hours per year X .0005 ton per pound = 0.17 ton per year

**resin injection to mixer**

0.30 pound of particulate emissions per ton of sand\* X 22.5 ton of sand per hour X 70% control efficiency( resin application) = 2.03 pounds per hour

0.30 pound per ton of sand X 22,500 ton of sand per year X 70% control efficiency( resin application) X 0.0005 ton per pound = 0.56 ton per year

0.04 pounds per hour + 2.03 pounds per hour = 2.1 pounds per hour

0.17 ton per year + 0.56 ton per year = 0.73 ton per year

\* Emission factor from RACM Table 2.1.3-3

**b. Emission Limitation:**

There shall be no visible fugitive particulate emission.

**Applicable Compliance Method:**

If required, visible fugitive particulate emissions shall be determined according to test Method 22 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources".

**c. Emission Limitation:**

Volatile organic compound emissions shall not exceed 32.4 pounds per hour.

**Applicable Compliance Method:**

Compliance with the allowable volatile organic compound emissions rate of 32.4 pounds per hour, shall be determined by a calculation of 1.44 pounds volatile organic compound per ton of sand\* multiplied by the maximum tons of sand (22.5) processed in one hour.

\* Ashland Data based on Ohio Casting Metal Association weight loss method.

**d. Emission Limitation:**

Volatile organic compound emissions shall not exceed 9.0 tons per year as a rolling 12-month summation.

**Applicable Compliance Method:**

Compliance with the allowable volatile organic compound emissions rate of 9.0 tons per year as a rolling 12-month summation, shall be determined by a

monthly calculation of 1.44 pounds volatile organic compound per ton of sand multiplied by the tons of sand used, and divided by 2000 pounds per ton; added to the previous 11 months emissions in tons volatile organic compound, in accordance with the monitoring and recordkeeping requirements contained in this permit.

- e. Emission Limitation:  
Total volatile organic compound emission from the mold/core release agent used in emission units F005 and F022 shall not exceed 8.50 pounds per hour and 1.43 tons per year.

Applicable Compliance Method:

Compliance with the allowable volatile organic compound emission rate of 8.50 pounds per hour, shall be determined by a calculation of 0.85\* pound volatile organic compound per pound of release agent used in emission units F005 and F022 multiplied by 10 pounds per hour ( the maximum pounds) of release agent used.

Compliance with the allowable volatile organic compound emission rate of 1.43 tons per year shall be determined by a calculation of 0.85\* pound volatile organic compound per pound of release agent used in emission units F005 and F022 multiplied by 3,355 pounds per year ( the maximum pounds) of release agent used multiplied by 0.0005 ton per pound.

\* Emission factor from Refcopart 8000 MSDS

## VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

**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>
F005 - Large PUNB Mold/Core Making	None	None

**2. Additional Terms and Conditions**

**2.a** None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

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>
F022 - Small PUNB Core/Mold Making with baghouse	OAC rule 3745-31-05(A)(3)  OAC rule 3745-31-05(C)  OAC rule 3745-17-08(B) OAC rule 3745-21-07(G) OAC rule 3745-17-11(B)(1)  OAC rule 3745-17-07(A)

**Clow****PTI A****Issued: 7/7/2005**Emissions Unit ID: **F022**

Applicable Emissions  
Limitations/Control  
Measures

Particulate emissions from the baghouse exhaust shall not exceed 0.030 grain per dry standard cubic foot (equivalent to 0.46 pound per hour) or no visible particulate emissions from the stack, whichever is less stringent.

Particulate emissions from the baghouse shall not exceed 2.03 tons per year. (This is a combined total allowable limit for particulate emission from this baghouse which serves emissions units F022 and F014)

Fugitive particulate emissions shall not exceed 0.05 pounds per hour and 0.04 ton per year.

There shall be no visible fugitive particulate emission.

Volatile organic compound emissions shall not exceed 14.69 pounds per hour.

Total volatile organic compound emission from the mold/core release agent used in emission units F005 and F022 shall not exceed 8.50 pounds per hour and 1.43 tons per year.

Volatile organic compound emissions shall not exceed 12.87 tons per year as a rolling 12-month summation.

See A.1.2.a

See A.1.2.b

The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to the best available technology requirements specified in OAC rule 3745-31-05(A)(3).

The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to the best available technology requirements specified in OAC rule 3745-31-05(A)(3).

## **2. Additional Terms and Conditions**

- 2.a** This facility is located in Coshocton County, which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions from this emissions unit are exempt from the fugitive dust control requirements and visible emission limitation established in OAC rules 3745-17-08(B) and 3745-17-07(B), respectively.
- 2.b** This emissions unit is exempt from the requirements of OAC rule 3745-21-07(G) pursuant to OAC rule 3745-21-07(G)(9)(i) [the use of a phenolic urethane no-bake resin binder system in foundry core-making and mold-making operations]. This exemption was adopted by the Director of Ohio EPA and became effective June 15, 1999. The US EPA has agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of US EPA approval of this rule as revision to the Ohio SIP for ozone.

## **II. Operational Restrictions**

- 1.** The maximum annual throughput of this emissions unit shall not exceed 17,870 tons of sand per year, based on a rolling 12-month summation.

## **III. Monitoring and/or Record keeping Requirements**

- 1.** The permittee shall perform daily checks, when the emissions unit is in operation, for any visible fugitive particulate emissions from the mixer and/or the day bin vent. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a.** The color of the emissions;
  - b.** The total duration of any visible emission incident; and
  - c.** Any corrective actions taken to eliminate the visible emissions.
- 2.** The permittee shall maintain monthly records of the following information:
- a.** The tons of sand used;

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- b. The total volatile organic compound emissions, in tons, calculated by multiplying the tons of sand used by 1.44 pounds of volatile organic compound per ton of sand used obtained from the Ashland Data based on Ohio Casting Metal Association weight loss method.;
  - c. The rolling, 12-month summation of volatile organic compound emissions, in tons (i.e., the throughput for the current month added to the throughput for the previous 11 calendar months); and
  - d. The rolling, 12-month summation of sand throughput, in tons (i.e., the throughput for the current month added to the throughput for the previous 11 calendar months).
3. The permittee shall maintain monthly records of the following information for mold/core release agent used in emission units F005 and F022, combined:
    - a. The total pounds used ;
    - b. The monthly volatile organic compound emission rate, in tons, calculated by multiplying the pounds of mold/core release agent used by the emission factor of 0.85 pound of volatile organic compound emissions per pound of mold/core release agent used obtained from the Refcopart 8000 MSDS; and
    - c. The year to date volatile organic compound emission rate based on the summation of the monthly volatile organic compound emissions, in tons.

#### **IV. Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the mixer and/or the day bin vent and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall notify the Ohio EPA, Southeast District Office of any monthly record showing an exceedance of the rolling, 12-month throughput limitations specified in section A.II.1. A copy of such record shall be sent to the Ohio EPA, Southeast District Office within 30 days following the end of the calendar month.
3. The permittee shall notify the Ohio EPA, Southeast District Office of any yearly record showing an exceedance of the annual mold/core release agent emission limitation specified in section A.I.1. A copy of such record shall be sent to the Ohio EPA, Southeast District Office within 30 days following the end of the calendar year.

## V. Testing Requirements

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

- a. Emission Limitation:

Particulate emissions from the baghouse exhaust shall not exceed 0.030 grain per dry standard cubic foot (equivalent to 0.46 pound per hour) or no visible particulate emissions from the stack, whichever is less stringent.

Applicable Compliance Method:

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources".

If required, visible particulate emissions shall be determined according to test Method 22 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources".

- b. Emission Limitation:

Fugitive particulate emissions shall not exceed 0.05 pounds per hour and 0.04 ton per year.

Applicable Compliance Method:

Compliance shall be demonstrated using the following equations :

$$0.30 \text{ pound of particulate emissions per ton of sand}^* \times 10.2 \text{ ton of sand per hour} \\ \times 70\% \text{ control efficiency (resin application)} \times 95\% \text{ capture efficiency (baghouse)} \\ = 0.05 \text{ pounds per hour}$$

$$0.30 \text{ pound per ton of sand} \times 22,500 \text{ ton of sand per year} \times 70\% \text{ control} \\ \text{efficiency (resin application)} \times 95\% \text{ capture efficiency (baghouse)} \times 0.0005 \text{ ton} \\ \text{per pound} = 0.56 \text{ ton per year}$$

\* Emission factor from RACM Table 2.1.3-3

- c. Emission Limitation:

There shall be no visible fugitive particulate emission.

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Applicable Compliance Method:

If required, visible fugitive particulate emissions shall be determined according to test Method 22 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources".

d. Emission Limitation:

Volatile organic compound emissions shall not exceed 14.69 pounds per hour.

Applicable Compliance Method:

Compliance with the allowable volatile organic compound emissions rate of 14.69 pounds per hour, shall be determined by a calculation of 1.44 pounds volatile organic compound per ton of sand\* multiplied by the maximum tons of sand (10.20) processed in one hour.

\* Ashland Data based on Ohio Casting Metal Association weight loss method.

e. Emission Limitation:

Volatile organic compound emissions shall not exceed 12.87 tons per year as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the allowable volatile organic compound emissions rate of 12.87 tons per year as a rolling 12-month summation, shall be determined by a monthly calculation of 1.44 pounds volatile organic compound per ton of sand multiplied by the tons of sand used, and divided by 2000 pounds per ton; added to the previous 11 months emissions in tons volatile organic compound, in accordance with the monitoring and record keeping requirements contained in this permit.

f. Emission Limitation:

Total volatile organic compound emission from the mold/core release agent used in emission units F005 and F022 shall not exceed 8.50 pounds per hour and 1.43 tons per year.

Applicable Compliance Method:

Compliance with the allowable volatile organic compound emission rate of 8.50 pounds per hour, shall be determined by a calculation of 0.85\* pound volatile organic compound per pound of release agent used in emission units F005 and F022 multiplied by 10 pounds per hour ( the maximum pounds) of release agent used.

Compliance with the allowable volatile organic compound emission rate of 1.43 tons per year shall be determined by a calculation of 0.85\* pound volatile organic compound per pound of release agent used in emission units F005 and F022 multiplied by 3,355 pounds per year ( the maximum pounds) of release

agent used multiplied by 0.0005 ton per pound.

\* Emission factor from Refcopart 8000 MSDS

## **VI. Miscellaneous Requirements**

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

**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>
F022 - Small PUNB Core/Mold Making	None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None