



State of Ohio Environmental Protection Agency

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

**CERTIFIED MAIL**

Street Address:

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

Mailing Address:

Lazarus Gov.  
Center

**Application No: 07-00509**

**DATE: 8/22/2002**

OSCO Industries Portsmouth Division  
Harry Gulley  
P O Box 1388 11th and Chillicothe Streets  
Portsmouth, OH 45662

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*

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

CC: USEPA

PCHD



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install  
Terms and Conditions**

**Issue Date: 8/22/2002  
Effective Date: 8/22/2002**

**FINAL PERMIT TO INSTALL 07-00509**

Application Number: 07-00509  
APS Premise Number: 0773010001  
Permit Fee: **\$4000**  
Name of Facility: OSCO Industries Portsmouth Division  
Person to Contact: Harry Gulley  
Address: P O Box 1388 11th and Chillicothe Streets  
Portsmouth, OH 45662

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**11th and Chillicothe Streets**  
**Portsmouth, Ohio**

Description of proposed emissions unit(s):  
**Electric Holding Furnace and Disamatic No 2.**

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.10 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 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 Recordkeeping 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**

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**

<b><u>Pollutant</u></b>	<b><u>Tons Per Year</u></b>
Particulate (stack)	107.34
(fugitive)	5.17
VOC	25.02
CO	90.0
NO <sub>x</sub>	0.18
SO <sub>2</sub>	0.36

**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>
F007 - Electric Holding Furnace vented to the Central Dust Collector (CDC) and the East Foundry Dust Collector (EFDC)	OAC rule 3745-31-05(A)(3)
modification to include the Central Dust Collector	OAC rule 3745-17-11(B)
The terms in this permit supercede those identified in PTI 07-414 issued on 6/12/96.	OAC rule 3745-17-07(A)

Applicable Emissions  
Limitations/Control Measures

Particulate emissions from the EFDC baghouse shall not exceed 0.015 grain per dry standard cubic feet of exhaust gases.

Particulate emissions from the CDC baghouse shall not exceed 0.015 grain per dry standard cubic feet of exhaust gases.

Particulate emissions from the EFDC baghouse, of all emissions units vented to the baghouse, shall not exceed 36.65 tons per year. See section A.I.2.a below.

Particulate emissions from the CDC baghouse, of all emissions units vented to the baghouse, shall not exceed 36.65 tons per year. See section A.I.2.a below.

Fugitive particulate emissions shall not exceed 0.71 pound per hour and 3.12 tons per year.

Visible emissions from the CDC and EFDC baghouse stacks shall not exceed 10% opacity, as a 6-minute average.

The emission limitation established by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

The emission limitation established by this rule is less stringent than the emission limitation established pursuant to OAC rule

3745-31-05(A)(3).

## 2. Additional Terms and Conditions

- 2.a** If any additional emissions units are vented to the EFDC and/or the CDC baghouses, each dust collector's allowable rate shall remain at 0.015 grains per dry standard cubic foot of exhaust gases.

The following emissions units vent to the EFDC: F001 (cooling), F003 (shakeout), F007 (transfer from cupolas), P005, and P013 (cooling).

The following emissions units vent to the CDC: F001 (pouring, cooling), F002 (pouring, cooling, shakeout), F007, and P013 (cooling).

The permittee reserves the right to direct the particulate 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 0.015 grain per actual cubic foot of the total exhaust gases 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 OAC rule 3745-31-01.

## II. Operational Restrictions

1. The pressure drop across the EFDC baghouse shall be maintained within the range of 2-9 inches of water while the emissions unit is in operation.

The pressure drop across the CDC baghouse shall be maintained within the range of 2-9 inches of water while the emissions unit is in operation.

## III. Monitoring and/or Record keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the EFDC and CDC baghouses while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouses on a daily basis.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the CDC and EFDC stacks serving this emissions unit. 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. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the weekly check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

1. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the EFDC or CDC baghouse did not comply with the allowable range specified above.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Portsmouth Local Air Agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The deviation (excursion) reports shall be submitted in accordance with Part 1 - General Terms and Conditions of this permit under section (A)(1).

#### **V. Testing Requirements**

1. Compliance with the emission limitation in section A.1 of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:

Particulate emissions from the EFDC baghouse shall not exceed 0.015 grain per dry standard cubic feet of exhaust gases.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures and methods required in OAC rule 3745-17-03(B)(10).
  - b. Emission Limitation:

Particulate emissions from the CDC baghouse shall not exceed 0.015 grain per dry standard cubic feet of exhaust gases.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures and methods required in OAC rule 3745-17-03(B)(10).
  - c. Emission Limitation:

Particulate emissions from the EFDC baghouse, of all emissions units vented to the baghouse, shall not exceed 36.65 tons per year.

Applicable Emission Limitation:

The tons/year emissions limitation was developed by multiplying the particulate emission rate, 0.015 gr/dscf, times the maximum airflow from the baghouse (65,088 scf/m), times 60 minutes/hour, divided by 7,000 grains/pound times the maximum potential operating schedule of 8,760 hours/year, and dividing by 2,000 pounds/ton. Therefore, provided compliance is shown with the gr/dscf limitation, compliance will also be shown with the annual limitation.
  - d. Emission Limitation:

Particulate emissions from the CDC baghouse, of all emissions units vented to the baghouse, shall not exceed 36.65 tons per year.

Applicable Emission Limitation:

The tons/year emissions limitation was developed by multiplying the particulate emission rate, 0.015 gr/dscf, times the maximum airflow from the baghouse (65,088 scf/m), times 60 minutes/hour, divided by 7,000 grains/pound times the maximum potential operating schedule of 8,760 hours/year, and dividing by 2,000 pounds/ton. Therefore, provided compliance is shown with the gr/dscf limitation, compliance will also be shown with the annual limitation.

e. Emission Limitation:

Fugitive particulate emissions shall not exceed 0.71 pound per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the 0.19 pound/ton emission factor by the maximum iron poured, in tons/hour times 0.15 assuming a 85% capture efficiency by the baghouse. The particulate emission factor was obtained from AP-42, Section 12, Table 12.5-1, dated 10/86.

f. Emission Limitation:

Fugitive particulate emissions shall not exceed 3.12 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by 8,760 hours per year and dividing by 2,000 pounds per ton. Compliance with the ton per year emission limitation shall be assumed provided compliance with the hourly emission limitation is maintained.

g. Emission Limitation:

Visible emissions from the CDC and EFDC baghouse stacks shall not exceed 10% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9.

2. The following emissions units vent to the EFDC baghouse: F001 (cooling), F003 (shakeout), F007 (transfer from cupolas), P005, and P013 (cooling).

The following emissions units vent to the CDC baghouse: F001 (pouring, cooling), F002 (pouring, cooling, shakeout), F007, and P013 (cooling).

The permittee shall conduct, or have conducted, emission testing for the EFDC and CDC baghouses simultaneously in accordance with the following requirements:

- a. The emission testing shall be conducted within three months of the issuance of this permit to install.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate matter.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): U. S. EPA Method 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U. S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted at the EFDC and CDC baghouse outlets with one of the cupolas operating at or near the maximum melt rate and all emissions units venting to the EFDC and CDC baghouses operating at rates which support the maximum cupola melt rate, unless otherwise specified or approved by the Portsmouth Local Air Agency.
- e. Since multiple emissions units vent to common baghouses and it is not technically feasible to isolate specific emissions units for the purpose of emission testing, the summation of the total particulate emission rates from each of the WDC, CDC and EFDC baghouses will be compared to the baghouse outlet emission limitation of 0.015 grain/dscf per baghouse for the purpose of demonstrating compliance.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth Local Air Agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth Local Air Agency 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 and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Portsmouth Local Air Agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth Local Air Agency.

## 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>
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**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>
P013 - Disamatic #2 (mold making, pouring, cooling, and shakeout) vented to the East Foundry Dust Collector (EFDC), the Central Dust Collector (CDC), and the West Dust Collector (WDC)	OAC rule 3745-31-05(A)(3)
modification to include the Central Dust Collector and to include a synthetic minor restriction for carbon monoxide	
The terms in this permit supercede those identified in PTI 07-217 issued on 4/4/90.	

	<u>Applicable Emissions Limitations/Control Measures</u>	
OAC rule 3745-17-11(B)	<p>Particulate emissions from the EFDC baghouse shall not exceed 0.015 grain per dry standard cubic feet of exhaust gases.</p>	<p>year.</p> <p>Carbon monoxide emissions shall not exceed 50.0 pounds per hour and 90.0 tons per year.</p> <p>Nitrogen oxide emissions shall not exceed 0.10 pound per hour and 0.18 ton per year.</p>
OAC rule 3745-17-07(A)	<p>Particulate emissions from the CDC baghouse shall not exceed 0.015 grain per dry standard cubic feet of exhaust gases.</p>	<p>Sulfur dioxide emissions shall not exceed 0.20 pound per hour and 0.36 ton per year.</p>
	<p>Particulate emissions from the WDC baghouse shall not exceed 0.015 grain per dry standard cubic feet of exhaust gases.</p>	<p>Fugitive particulate emissions shall not exceed 0.86 pound per hour and 1.55 tons per year.</p>
	<p>Particulate emissions from the EFDC baghouse, of all emissions units vented to the baghouse, shall not exceed 36.65 tons per year. See section A.I.2.a below.</p>	<p>The emission limitation established by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
	<p>Particulate emissions from the CDC baghouse, of all emissions units vented to the baghouse, shall not exceed 36.65 tons per year. See section A.I.2.a below.</p>	<p>Visible particulate emissions from the WDC baghouse stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.</p>
	<p>Particulate emissions from the WDC baghouse, of all emissions units vented to the baghouse, shall not exceed 34.04 tons per year. See section A.I.2.a below.</p>	
	<p>Visible emissions from the CDC and EFDC baghouse stacks shall not exceed 10% opacity, as a 6-minute average.</p>	
	<p>Volatile organic compound emissions shall not exceed 13.9 pounds per hour and 25.02 tons per</p>	

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**Issued: 8/22/2002**

Emissions Unit ID: **P013**

## 2. Additional Terms and Conditions

- 2.a** If any additional emissions units are vented to the EFDC, CDC, and/or the WDC baghouses, each dust collector's allowable rate shall remain at 0.015 grain per dry standard cubic foot of exhaust gases.

The following emissions units vent to the EFDC: F001 (cooling), F003 (shakeout), F007 (transfer from cupolas), P005, and P013 (cooling).

The following emissions units vent to the CDC: F001 (pouring, cooling), F002 (pouring, cooling, shakeout), F007, and P013 (cooling).

The following emissions units vent to the WDC: F001 (shakeout), F002 (shakeout), P002, and P013 (pouring, cooling, shakeout).

The permittee reserves the right to direct the particulate 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 0.015 grain per actual cubic foot of the total exhaust gases 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 OAC rule 3745-31-01.

## II. Operational Restrictions

- 1.** The pressure drop across the EFDC baghouse shall be maintained within the range of 2-9 inches of water while the emissions unit is in operation.

The pressure drop across the CDC baghouse shall be maintained within the range of 2-9 inches of water while the emissions unit is in operation.

The pressure drop across the WDC baghouse shall be maintained within the range of 2-9 inches of water while the emissions unit is in operation.

2. The maximum annual production rate for this emissions unit shall not exceed 36,000 tons, based upon a rolling, 12-month summation of the production rates.

To ensure enforceability during the first 12 calendar months of operation after the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Production</u>
1	3,000
1-2	6,000
1-3	9,000
1-4	12,000
1-5	15,000
1-6	18,000
1-7	21,000
1-8	24,000
1-9	27,000
1-10	30,000
1-11	33,000
1-12	36,000

After the first 12 calendar months of operation after the issuance of this permit, compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the production rates.

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

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the EFDC, CDC, and WDC baghouses while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouses on a daily basis.
2. The permittee shall maintain monthly records of the following information:
  - a. The production rate for each month.
  - b. Beginning after the first 12 calendar months of operation after the issuance of this permit, the rolling, 12-month summation of the production rates.

Also, during the first 12 calendar months of operation after issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the

weather conditions allow, for any visible particulate emissions from the CDC, EFDC, and WDC stacks serving this emissions unit. 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. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the weekly check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 location and color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.

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

**Issued**Emissions Unit ID: **P013**

1. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the EFDC, CDC, or WDC baghouse did not comply with the allowable range specified above.
2. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation and, for the first 12 calendar months of operation after issuance of this permit, all exceedances of the maximum allowable cumulative production levels.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the CDC, EFDC, or WDC baghouse stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Portsmouth Local Air Agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Portsmouth Local Air Agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
5. The deviation (excursion) reports shall be submitted in accordance with Part 1 - General Terms and Conditions of this permit under section (A)(1).

**V. Testing Requirements**

1. Compliance with the emission limitation in section A.1 of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:

Particulate emissions from the EFDC baghouse shall not exceed 0.015 grain per dry standard cubic feet of exhaust gases.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures and methods required in OAC rule 3745-17-03(B)(10).
  - b. Emission Limitation:

Particulate emissions from the CDC baghouse shall not exceed 0.015 grain per dry standard cubic feet of exhaust gases.

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**Issued: 8/22/2002**

Emissions Unit ID: **P013**

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures and methods required in OAC rule 3745-17-03(B)(10).

## c. Emission Limitation:

Particulate emissions from the WDC baghouse shall not exceed 0.015 grain per dry standard cubic feet of exhaust gases.

## Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures and methods required in OAC rule 3745-17-03(B)(10).

## d. Emission Limitation:

Particulate emissions from the EFDC baghouse, of all emissions units vented to the baghouse, shall not exceed 36.65 tons per year.

## Applicable Emission Limitation:

The tons/year emissions limitation was developed by multiplying the particulate emission rate, 0.015 gr/dscf, times the maximum airflow from the baghouse (65,088 scf/m), times 60 minutes/hour divided by 7,000 grains/pound times the maximum potential operating schedule of 8,760 hours/year, and dividing by 2,000 pounds/ton. Therefore, provided compliance is shown with the gr/dscf limitation, compliance will also be shown with the annual limitation.

## e. Emission Limitation:

Particulate emissions from the CDC baghouse, of all emissions units vented to the baghouse, shall not exceed 36.65 tons per year.

## Applicable Emission Limitation:

The tons/year emissions limitation was developed by multiplying the particulate emission rate, 0.015 gr/dscf, times the maximum airflow from the baghouse (65,088 scf/m), times 60 minutes/hour divided by 7,000 grains/pound times the maximum potential operating schedule of 8,760 hours/year, and dividing by 2,000 pounds/ton. Therefore, provided compliance is shown with the gr/dscf limitation, compliance will also be shown with the annual limitation.

## f. Emission Limitation:

Particulate emissions from the WDC baghouse, of all emissions units vented to the baghouse, shall not exceed 34.04 tons per year.

## Applicable Emission Limitation:

The tons/year emissions limitation was developed by multiplying the particulate emission rate, 0.015 gr/dscf, times the maximum airflow from the baghouse (60,439 scf/m), times 60 minutes/hour divided by 7,000 grains/pound times the maximum potential operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the gr/dscf limitation, compliance will also be shown with the annual limitation.

## g. Emission Limitation:

Visible emissions from the CDC and EFDC baghouse stacks shall not exceed 10% opacity, as a 6-minute average.

## Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9.

## h. Emission Limitation:

Volatile organic compound emissions shall not exceed 13.90 pounds per hour.

## Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of the following:

## i. Pouring &amp; Cooling:

Multiply the 0.19 pound/ton VOC emission factor by the maximum iron poured, in tons/hour. The VOC emission factor obtained from a Casting Emissions Reduction Program document titled "Foundry Process Emission Factors: Baseline Emissions from Automotive Foundries in Mexico", dated 1/19/99.

## ii. Shakeout:

Multiply the 1.2 pounds/ton VOC emission factor by the maximum iron poured, in tons/hour. The VOC emission factor obtained from the FIRE database Version 6.23 (SCC 3-04-003-31).

## i. Emission Limitation:

Volatile organic compound emissions shall not exceed 25.02 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of the following:

- i. Pouring & Cooling:  
Multiply the 0.19 pound/ton VOC emission factor by the actual iron poured, in tons/year, and divide by 2,000 pounds/ton. The VOC emission factor obtained from a Casting Emissions Reduction Program document titled "Foundry Process Emission Factors: Baseline Emissions from Automotive Foundries in Mexico", dated 1/19/99.
- ii. Shakeout:  
Multiply the 1.2 pounds/ton VOC emission factor by the actual iron poured, in tons/year, and divide by 2,000 pounds/ton. The VOC emission factor obtained from the FIRE database Version 6.23 (SCC 3-04-003-31).

- j. Emission Limitation:

Carbon monoxide emissions shall not exceed 50.0 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A , Methods 1 through 4 and 10.

The emissions limits were established using CO emission factors obtained from the RACT/BACT/LAER Clearinghouse database for a similar line at a GM Waupaca foundry (4 lb/ton for pouring/cooling and 1 lb/ton for shakeout).

- k. Emission Limitation:

Carbon monoxide emissions shall not exceed 90.0 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the CO emission factor, in pounds/ton, times the actual iron poured, in tons/year, divided by 2,000 pounds/ton. The CO emission factor shall be calculated from the results of the most recent stack test which demonstrated

compliance.

l. Emission Limitation:

Nitrogen oxide emissions shall not exceed 0.10 pound per hour.

Applicable Compliance Method:

Compliance shall be calculated by multiply the 0.01 pound/ton NO<sub>x</sub> emission factor by the maximum iron poured/cooled, in tons/hour. The NO<sub>x</sub> emission factor for pouring/cooling was obtained from the FIRE database Version 6.23 (SCC 3-04-003-20).

m. Emission Limitation:

Nitrogen oxide emissions shall not exceed 0.18 ton per year.

Applicable Compliance Method:

Compliance shall be calculated by multiply the 0.01 pound/ton NO<sub>x</sub> emission factor by the actual iron poured/cooled, in tons/year, and divide by 2,000 pounds/ton. The NO<sub>x</sub> emission factor for pouring/cooling was obtained from the FIRE database Version 6.23 (SCC 3-04-003-20).

n. Emission Limitation:

Sulfur dioxide emission shall not exceed 0.20 pound per hour.

Applicable Compliance Method:

Compliance shall be calculated by multiply the 0.02 pound/ton SO<sub>2</sub> emission factor by the maximum iron poured/cooled, in tons/hour. The SO<sub>2</sub> emission factor for pouring/cooling was obtained from the FIRE database Version 6.23 (SCC 3-04-003-20).

o. Emission Limitation:

Sulfur dioxide emission shall not exceed 0.36 ton per year.

Applicable Compliance Method:

Compliance shall be calculated by multiply the 0.02 pound/ton SO<sub>2</sub> emission factor by the

Emissions Unit ID: P013

actual iron poured/cooled, in tons/year, and divide by 2,000 pounds/ton. The SO<sub>2</sub> emission factor for pouring/cooling was obtained from the FIRE database Version 6.23 (SCC 3-04-003-20).

p. Emission limitation:

Fugitive particulate emissions shall not exceed 0.86 pound per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of the following:

- i. **Mold Making:**  
Multiply the 0.04 pound/ton emission factor by the maximum iron poured, in tons/hour, times 0.30 assuming a 70% building capture efficiency. The particulate emission factor was obtained from RACM, Table 2.7-1, #15, dated 11/80.
- ii. **Pouring:**  
Multiply the 2.8 pounds/ton particulate emission factor by the maximum iron poured, in tons/hour, times 0.01 assuming a 99% capture efficiency by the baghouse. The particulate emission factor was obtained from AP-42 Section 12, Table 12.10-7, dated 1-95.
- iii. **Cooling:**  
Multiply the 1.4 pounds/ton particulate emission factor by the maximum iron poured, in tons/hour, times 0.01 assuming a 99% capture efficiency by the baghouse. The particulate emission factor was obtained from AP-42 Section 12, Table 12.10-7, dated 1-95.
- iv. **Shakeout:**  
Multiply the 3.20 pounds/ton particulate emission factor by the maximum iron poured, in tons/hour, times 0.01 assuming a 99% capture efficiency by the baghouse. The particulate emission factor was obtained from the AP-42, Section 12, Table 12.10-7, dated 1/95.

q. Emission limitation:

Fugitive particulate emissions shall not exceed 1.55 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of the following:

- i. **Mold Making:**  
Multiply the 0.04 pound/ton emission factor by the actual iron poured, in

tons/year, divided by 2,000 pounds/ton, times 0.30 assuming a 70% building capture efficiency. The particulate emission factor was obtained from RACM, Table 2.7-1, #15, dated 11/80.

- ii. Pouring:  
Multiply the 2.8 pounds/ton particulate emission factor by the actual iron poured, in tons/year, times 0.01 assuming a 99% capture efficiency by the baghouse, and divided by 2,000 pounds/ton. The particulate emission factor was obtained from AP-42 Section12, Table 12.10-7, dated 1-95.
- iii. Cooling:  
Multiply the 1.4 pounds/ton particulate emission factor by the actual iron poured, in tons/year, times 0.01 assuming a 99% capture efficiency by the baghouse, and divide by 2,000 pounds/ton. The particulate emission factor was obtained from AP-42 Section12, Table 12.10-7, dated 1-95.

- iv. Shakeout:  
Multiply the 3.20 pounds/ton particulate emission factor by the actual iron poured, in tons/year, times 0.01 assuming a 99% capture efficiency by the baghouse, and divide by 2,000 pounds/ton. The particulate emission factor was obtained from the AP-42, Section 12, Table 12.10-7, dated 1/95.

- r. Emission Limitation:

Visible particulate emissions from the WDC baghouse stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and the procedures and methods required in OAC rule 3745-17-03(B)(1).

- 2. The following emissions units vent to the EFDC baghouse: F001 (cooling), F003 (shakeout), F007 (transfer from cupolas), P005, and P013 (cooling).

The following emissions units vent to the WDC baghouse: F001 (shakeout), F002 (shakeout), P002, and P013 (pouring, cooling, shakeout).

The following emissions units vent to the CDC baghouse: F001 (pouring, cooling), F002 (pouring, cooling, shakeout), F007, and P013 (cooling).

The permittee shall conduct, or have conducted, emission testing for the EFDC, WDC, and CDC baghouses simultaneously in accordance with the following requirements:

- a. The emission testing shall be conducted within three months of the issuance of this permit to install.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate matter.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): U. S. EPA Method 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U. S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted at the EFDC, CDC, and WDC baghouse outlets with one of the cupolas operating at or near the maximum melt rate and all emissions units venting to the EFDC, CDC, and WDC baghouses operating at rates which support the maximum cupola melt rate, unless otherwise specified or approved by the Portsmouth Local Air Agency.
- e. Since multiple emissions units vent to common baghouses and it is not technically feasible to isolate specific emissions units for the purpose of emission testing, the summation of the total particulate emission rates from each of the WDC, CDC and EFDC baghouses will be compared to the baghouse outlet emission limitation of 0.015 grain/dscf per baghouse for the purpose of demonstrating compliance.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth Local Air Agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth Local Air Agency 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 and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Portsmouth Local Air Agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth Local Air Agency.

3. The permittee shall conduct, or have conducted, emission testing for Disamatic #2 pouring, cooling, and shakeout simultaneously in accordance with the following requirements:
  - a. The emission testing shall be conducted within three months of the issuance of this permit to install.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for carbon monoxide.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): U. S. EPA Method 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U. S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted while Disamatic #2 is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth Local Air Agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth Local Air Agency 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 and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Portsmouth Local Air Agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth Local Air Agency.

## **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>

**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

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text):

Synthetic Minor Determination and/or  Netting Determination  
Permit To Install 07-00509

**A. Source Description**

OSCO Industries operates a grey iron foundry in Portsmouth, Ohio. They have submitted a permit to install application to address the installation of the Central Dust Collector which resulted in a chapter 31 modification of two emissions units: the electric holding furnace (F007) and Disamatic #2 (P013) mold making, pouring, cooling, and shakeout.

**B. Facility Emissions and Attainment Status**

This facility is major for particulate matter and carbon monoxide. Scioto county is attainment/unclassifiable for all criteria pollutants in accordance with 40 CFR 81.336.

**C. Source Emissions**

P013 was installed in 1990 via PTI 07-217. In 1990, no carbon monoxide emission factors were available for pouring/cooling/shakeout; therefore, CO was not included in the application or the final permit.

The permittee has recently become aware of CO emissions testing performed at GM Waupaca's pouring/cooling/shakeout operations. The result's of GM's tests were used as emission factors in several GM PSD permits posted on the RBLC website. Using these emission factors at the maximum operating rate of P013 (10 ton/hr), results in emissions of 219 tons/year CO triggering PSD review.

In order to avoid PSD, the permittee has requested an annual operating restriction of 36,000 tons of iron poured per year at P013. The annual CO emissions with the operating restriction are limited to 90 tons/year.

In accordance with USEPA's Injunctive Relief Policy, it is acceptable for a facility to obtain a synthetic minor permit if the actual emissions did not exceed the PSD threshold and BACT is applied. For the GM foundry PSD permits, BACT for CO was found to be no controls feasible.

Actual CO emissions were determined using the GM emission factors and plant production records. The plant maintains records of the tons of iron poured for Disa #1 and Disa #2 combined. Since the two disa lines are identical (same maximum production rate) and they generally operate at the same time, we assume that 50% of the production was through each disa line (as discussed in a 12/18/01 phone conversation with Misty Parsons). The calculated actual emissions of CO from Disa #2 are as follows:

<u>Year</u>	<u>Tons of Iron Poured</u>	<u>Emission Factor</u>	<u>Tons of CO/year</u>
1990	12,643.60 tons/year	5 lb/ton	34.41 tons/year
1991	13,762.94 tons/year	5 lb/ton	31.61 tons/year
1992	14,198.46 tons/year	5 lb/ton	35.50 tons/year
1993	15,701.08 tons/year	5 lb/ton	39.25 tons/year
1994	21,270.92 tons/year	5 lb/ton	53.18 tons/year
1995	21,691.89 tons/year	5 lb/ton	54.23 tons/year
1996	22,743.00 tons/year	5 lb/ton	56.86 tons/year
1997	25,426.30 tons/year	5 lb/ton	63.56 tons/year
1998	22,279.52 tons/year	5 lb/ton	55.70 tons/year
1999	24,178.13 tons/year	5 lb/ton	60.44 tons/year
2000	24,451.37 tons/year	5 lb/ton	61.13 tons/year
2001	21,486.50 tons/year	5 lb/ton	53.71 tons/year

#### **D. Conclusion**

The terms and conditions in this permit to install will limit the emissions of CO from Disamatic #2, P013, to 90 tons per year. Therefore, this facility will not be subject to PSD review for the CO emissions from Disamatic #2.

**NEW SOURCE REVIEW FORM B**

PTI Number: 07-00509 Facility ID: 0773010001

FACILITY NAME OSCO Industries Portsmouth Division

FACILITY DESCRIPTION Grey Iron Foundry CITY/TWP Portsmouth

SIC CODE 3321 SCC CODE 3-04-003-99, 3-04-003-17 EMISSIONS UNIT ID F007

EMISSIONS UNIT DESCRIPTION Electric Holding Furnace

DATE INSTALLED 9/80

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.015 gr/dscf EFDC 0.015 gr/dscf CDC 0.71 lb/hr fugitive	36.65 tpy EFDC 36.65 tpy CDC 3.12 tpy fugitive	0.015 gr/dscf EFDC 0.015 gr/dscf CDC 0.71 lb/hr fugitive	36.65 tpy EFDC 36.65 tpy CDC 3.12 tpy fugitive
PM <sub>10</sub>	attainment				
Sulfur Dioxide	attainment				
Organic Compounds	attainment				
Nitrogen Oxides	attainment				
Carbon Monoxide	attainment				
Lead	attainment				
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination - vent to a baghouse which meets 0.015 gr/dscf, 10% opacity from the CDC and EFDC baghouses

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? YES NO

IDENTIFY THE AIR CONTAMINANTS:

**NEW SOURCE REVIEW FORM B**

PTI Number: 07-00509 Facility ID: 0773010001

FACILITY NAME OSCO Industries Portsmouth Division

FACILITY DESCRIPTION Grev Iron Foundry

CITY/TWP Portsmouth

Emissions Unit ID: **P013**

SIC CODE 3321 SCC CODE 3-04-003-20, 3-4-003-25, 3-04-003-31 EMISSIONS UNIT ID P013

EMISSIONS UNIT DESCRIPTION Disamatic No 2 Mold Making Pouring Cooling and Shakeout

DATE INSTALLED 9/90

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.015 gr/dscf EFDC 0.015 gr/dscf CDC 0.015 gr/dscf WDC 0.86 lb/hr fugitive	36.65 tpy EFDC 36.65 tpy CDC 34.04 tpy WDC 1.55 tpy fugitive	0.015 gr/dscf EFDC 0.015 gr/dscf CDC 0.015 gr/dscf WDC 0.86 lb/hr fugitive	36.65 tpy EFDC 36.65 tpy CDC 34.04 tpy WDC 1.55 tpy fugitive
PM <sub>10</sub>	attainment				
Sulfur Dioxide	attainment	0.20 lb/hr	0.36 tpy	0.20 lb/hr	0.36 tpy
Organic Compounds	attainment	13.9 lb/hr	25.02 tpy	13.90 lb/hr	25.02 tpy
Nitrogen Oxides	attainment	0.10 lb/hr	0.18 tpy	0.10 lb/hr	0.18 tpy
Carbon Monoxide	attainment	50.0 lb/hr	90.0 tpy	50.0 lb/hr	90.0 tpy
Lead	attainment				
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

Enter Determination - vent to a baghouse which meets 0.015 gr/dscf, 10% opacity from the EFDC or CDC baghouses

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no  
 OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? YES NO

IDENTIFY THE AIR CONTAMINANTS: