State of Ohio Environmental Protection Agency

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

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

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

RE: FINAL PERMIT TO INSTALL
SCIOTO COUNTY
Application No: 07-00487

CERTIFIED MAIL

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

DATE: 7/13/00

OSCO Industries New Boston Division
John Burke
PO Box 1388
Portsmouth, OH 45662-0000

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

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

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

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

Very truly yours,

Thomas G. Rigo

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

CC: USEPA **PCHD**

FINAL PERMIT TO INSTALL 07-00487

Application Number: 07-00487

APS Premise Number: 0773010180

Permit Fee: **$7400**

Name of Facility: OSCO Industries New Boston Division

Person to Contact: John Burke

Address: PO Box 1388
Portsmouth, OH 45662-0000

Location of proposed air contaminant source(s) [emissions unit(s)]:
202 Vine St
New Boston, **Ohio**

Description of proposed emissions unit(s):
Installation of Electric Induction Furnace C and increased iron process weight rates for Charge Handling, Electric Holding Furnace, and Disamatics 1 & 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. 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 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 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. Records Retention Requirements

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.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. 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 verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. 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 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. 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 emissions unit(s) that is (are) served by such control system(s).

6. 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.

7. 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.

8. 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.

9. 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 are inadequate 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 prove to be inadequate or cannot meet applicable standards.

10. 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.

11. 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).

12. 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.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This 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 emissions unit(s) covered by this permit.

14. 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.

15. 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.

B. Permit to Install Summary of Allowable Emissions

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

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

Pollutant	Tons Per Year
particulate	stack 71.1 fugitive 26.5
OC	34.4

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P916 - Electric Induction Furnace A controlled with the Foundry/Melt Dust Collector (FMDC) baghouse and the Wheelabrator Cartridge Collector (WCC) baghouse - Modification to increase melt rate to 33 tons of iron per hour for furnaces A, B, and C combined	OAC rule 3745-17-11	The emission limitation established pursuant to this rule is less stringent than the emission limitation established pursuant to 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 3745-31-05(A)(3).
	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-11 and 3745-17-07(A). 0.015 gr/dscf of particulate emissions from the FMDC baghouse 0.015 gr/dscf of particulate emissions from the WCC baghouse 0.50 lbs/hr and 1.6 tpy of fugitive particulate emissions See A.2.a and A.2.b below.

2. Additional Terms and Conditions

2.a Total emissions from the FMDC baghouse of all sources vented to the baghouse shall not exceed 24.6 tpy of particulate emissions. Total emissions from the WCC baghouse of all

sources vented to the baghouse shall not exceed 15.1 tpy of particulate emissions. The PM/PM_{10} emissions from the two roof vents shall not exceed 1.92 lbs/hour each.

2.b There shall be no visible particulate emissions from the baghouse stacks. There shall be no visible fugitive particulate emissions from building openings (such as roof vents, doors, etc.).

2.c If any additional sources are vented to the FMDC and/or the WCC baghouses, each dust collector's allowable rate shall remain at 0.015 grains per dry standard cubic foot of exhaust gases.

The following sources vent to the WCC:	P908, P913, P915, P916, P917
The following sources vent to the FMDC:	P005, P906 (pouring), P009, P910 (pouring), P012, P014, P915, P916, P917

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 Ohio Administrative Code (OAC) rule 3745-31-01.

B. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 6,240 hours, based upon a rolling, 12-month summation of the operating hours. The permittee shall comply with the rolling 12-month operating hours limitation immediately upon startup under this permit based on past records of monthly operating hours.

2. The pressure drop across the FMDC baghouse shall be maintained within the range of 2 to 9 inches of water while the emissions unit is in operation. The pressure drop across the WCC baghouse shall be maintained within the range of 4 to 12 inches of water while the emissions unit is in operation.

3. Any sources venting to the FMDC, SSDC, WCC and/or the EFDC baghouse(s) shall not operate unless the respective baghouse(s) is(are) in operation. To ensure that this condition is met, sources P005, P906, P908, P009, P910, P012, P913, P014, P915, P916, P917, and P918 shall have Programmable Logic Controllers (PLC's) which are programmed to prevent the sources from operating without the FMDC, SSDC, EFDC and/or WCC in operation. If a control equipment malfunction occurs, the sources vented to the respective baghouse, shall be shut down after the cycles are completed. An audible alarm shall be sounded to notify personnel of the malfunction.

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C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

   a. The operating hours for each month; and

   b. The rolling, 12-month summation of the operating hours.

2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the FMDC and WCC 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 weekly basis.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation.

2. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the FMDC and/or WCC baghouse(s) did not comply with the allowable range specified above.

3. The deviation (excursion) reports shall be submitted in accordance with Part 1 - General Terms and Conditions of this permit under section (A)(1).

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for the WCC and FMDC in accordance with the following requirements:

   a. The emission testing shall be conducted for the FMDC and WCC baghouses within 60 days of achieving a melt rate of 25 tons per hour and within 60 days of achieving a melt rate of 33 tons per hour from emissions unit P916.

   b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates from the baghouse(s) and the allowable mass emission rate for particulates from this emissions unit based on OAC rule 3745-17-11.

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): U. S. EPA Method 5, 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 for the FMDC and WCC baghouses simultaneously at worst case operations. Worst case operations for the FMDC and WCC includes:

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i. the three electric induction furnaces operating at or near maximum melt rates; and

ii. all sources venting to the FMDC and WCC baghouses operating at rates which support the maximum melt rate of the three furnaces (emissions units: P916, P917, and P915).

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.

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

a. Emission Limitation:

0.015 gr/dscf from the FMDC

Applicable Compliance Method:

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

b. Emission Limitation:

0.015 gr/dscf from the WCC

Applicable Compliance Method:

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

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c. Emission Limitation:

0.50 lbs/hr of fugitive particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum production rate, in tons/hour, times the particulate emission factor of 1.0 pound/ton (EPA 340/1-80-020, dated 1981), times 0.05 (based on 5% fugitive emissions and 95% captured emissions).

d. Emission Limitation:

1.6 tpy of fugitive particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum production rate, in tons/hour, times the particulate emission factor of 1.0 pound/ton (EPA 340/1-80-020, dated 1981), times 0.05 (based on 5% fugitive emissions and 95% captured emissions) times the hours of operation per year divided by 2,000 pounds/ton.

e. Emission Limitation:

24.6 tpy of particulate emissions from the FMDC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the grains/dry standard cubic foot (gr/dscf) as measured in the most recent stack test times the maximum rated airflow from the baghouse, in dscf/minute, times 60 minutes/hour divided by 7,000 grains/pound times the hours of operation per year divided by 2,000 pounds/ton.

f. Emission Limitation:

15.1 tpy of particulate emissions from the WCC

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Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the grains/dry standard cubic foot (gr/dscf) as measured in the most recent stack test times the maximum rated airflow from the baghouse, in dscf/minute, times 60 minutes/hour divided by 7,000 grains/pound times the hours of operation per year divided by 2,000 pounds/ton.

g. Emission Limitation:

1.92 lbs/hour of PM/PM_{10} from roof vent #1
1.92 lbs/hour of PM/PM_{10} from roof vent #2

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures in 40 CFR Part 60, Method 1 through 5, and the methods and procedures required in OAC rule 3745-17-03(B)(10).

h. Emission Limitation:

no visible particulate emissions from the baghouse stacks

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 methods and procedures required in OAC rule 3745-17-03(B)(1).

i. Emission Limitation:

no visible fugitive particulate emissions from building openings

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 22.

F. Miscellaneous Requirements

None.

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PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P917 - Electric Induction Furnace B controlled with the Foundry/Melt Dust Collector (FMDC) baghouse and the Wheelabrator Cartridge Collector (WCC) baghouse - Modification to increase melt rate to 33 tons of iron per hour for furnaces A, B, and C combined	OAC rule 3745-17-11	The emission limitation established pursuant to this rule is less stringent than the emission limitation established pursuant to 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 3745-31-05(A)(3).
	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-11 and 3745-17-07(A). 0.015 gr/dscf of particulate emissions from the FMDC baghouse 0.015 gr/dscf of particulate emissions from the WCC baghouse 0.50 lbs/hr and 1.6 tpy of fugitive particulate emissions See A.2.a and A.2.b below.

2.a Total emissions from the FMDC baghouse of all sources vented to the baghouse shall not exceed 24.6 tpy of particulate emissions. Total emissions from the WCC baghouse of all sources vented to the baghouse shall not exceed 15.1 tpy of particulate emissions. The PM/PM_{10} emissions from the two roof vents shall not exceed 1.92 lbs/hour each.

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2.b There shall be no visible particulate emissions from the baghouse stacks. There shall be no visible fugitive particulate emissions from building openings (such as roof vents, doors, etc.).

2.c If any additional sources are vented to the FMDC and/or the WCC baghouses, each dust collector's allowable rate shall remain at 0.015 grains per dry standard cubic foot of exhaust gases.

The following sources vent to the WCC:	P908, P913, P915, P916, P917
The following sources vent to the FMDC:	P005, P906 (pouring), P009, P910 (pouring), P012, P014, P915, P916, P917

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 Ohio Administrative Code (OAC) rule 3745-31-01.

B. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 6,240 hours, based upon a rolling, 12-month summation of the operating hours. The permittee shall comply with the rolling 12-month operating hours limitation immediately upon startup under this permit based on past records of monthly operating hours.

2. The pressure drop across the FMDC baghouse shall be maintained within the range of 2 to 9 inches of water while the emissions unit is in operation. The pressure drop across the WCC baghouse shall be maintained within the range of 4 to 12 inches of water while the emissions unit is in operation.

3. Any sources venting to the FMDC, SSDC, WCC and/or the EFDC baghouse(s) shall not operate unless the respective baghouse(s) is(are) in operation. To ensure that this condition is met, sources P005, P906, P908, P009, P910, P012, P913, P014, P915, P916, P917, and P918 shall have Programmable Logic Controllers (PLC's) which are programmed to prevent the sources from operating without the FMDC, SSDC, EFDC and/or WCC in operation. If a control equipment malfunction occurs, the sources vented to the respective baghouse, shall be shut down after the cycles are completed. An audible alarm shall be sounded to notify personnel of the malfunction.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

   a. The operating hours for each month; and

   b. The rolling, 12-month summation of the operating hours.

2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the FMDC and WCC 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 weekly basis.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation.

2. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the FMDC and/or WCC baghouse(s) did not comply with the allowable range specified above.

3. The deviation (excursion) reports shall be submitted in accordance with Part 1 - General Terms and Conditions of this permit under section (A)(1).

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for the WCC and FMDC in accordance with the following requirements:

   a. The emission testing shall be conducted for the FMDC and WCC baghouses within 60 days of achieving a melt rate of 25 tons per hour and within 60 days of achieving a melt rate of 33 tons per hour from emissions unit P917.

   b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates from the baghouse(s) and the allowable mass emission rate for particulates from this emissions unit based on OAC rule 3745-17-11.

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): U. S. EPA Method 5, 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 for the FMDC and WCC baghouses simultaneously at worst case operations. Worst case operations for the FMDC and WCC includes:

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i. the three electric induction furnaces operating at or near maximum melt rates; and

ii. all sources venting to the FMDC and WCC baghouses operating at rates which support the maximum melt rate of the three furnaces (emissions units: P916, P917, and P915).

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.

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

a. Emission Limitation:

0.015 gr/dscf from the FMDC

Applicable Compliance Method:

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

b. Emission Limitation:

0.015 gr/dscf from the WCC

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Applicable Compliance Method:

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

c. Emission Limitation:

0.50 lbs/hr of fugitive particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum production rate, in tons/hour, times the particulate emission factor of 1.0 pound/ton (EPA 340/1-80-020, dated 1981), times 0.05 (based on 5% fugitive emissions and 95% captured emissions).

d. Emission Limitation:

1.6 tpy of fugitive particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum production rate, in tons/hour, times the particulate emission factor of 1.0 pound/ton (EPA 340/1-80-020, dated 1981), times 0.05 (based on 5% fugitive emissions and 95% captured emissions) times the hours of operation per year divided by 2,000 pounds/ton.

e. Emission Limitation:

24.6 tpy of particulate emissions from the FMDC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the grains/dry standard cubic foot (gr/dscf) as measured in the most recent stack test times the maximum rated airflow from the baghouse, in dscf/minute, times 60 minutes/hour divided by 7,000 grains/pound times the hours of operation per year divided by 2,000 pounds/ton.

f. Emission Limitation:

15.1 tpy of particulate emissions from the WCC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the grains/dry standard cubic foot (gr/dscf) as measured in the most recent stack test times the maximum rated airflow from the baghouse, in dscf/minute, times 60 minutes/hour divided by 7,000 grains/pound times the hours of operation per year divided by 2,000 pounds/ton.

g. Emission Limitation:

1.92 lbs/hour of PM/PM_{10} from roof vent #1
1.92 lbs/hour of PM/PM_{10} from roof vent #2

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures in 40 CFR Part 60, Method 1 through 5, and the methods and procedures required in OAC rule 3745-17-03(B)(10).

h. Emission Limitation:

no visible particulate emissions from the baghouse stacks

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 methods and procedures required in OAC rule 3745-17-03(B)(1).

i. Emission Limitation:

no visible fugitive particulate emissions from building openings

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 22.

F. Miscellaneous Requirements

None.

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PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
F004 - Charge Handling controlled with a partial enclosure - Modification to increase rate to 33 tons per hour	OAC rule 3745-31-05(A)(3)	0.99 lbs/hr and 3.1 tpy of fugitive particulate emissions 20% opacity as a 3-minute average

2. Additional Terms and Conditions

2.a The hourly fugitive particulate emission limitation was established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

B. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 6,240 hours, based upon a rolling, 12-month summation of the operating hours. The permittee shall comply with the rolling 12-month operating hours limitation immediately upon startup under this permit based on past records of monthly operating hours.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

   a. The operating hours for each month; and

   b. The rolling, 12-month summation of the operating hours.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation.

2. The deviation (excursion) reports shall be submitted in accordance with Part 1 - General Terms and Conditions of this permit under section (A)(1).

E. Testing Requirements

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

   a. Emission Limitation:

      0.99 lbs/hr of fugitive particulate emissions

      Applicable Compliance Method:

      Compliance shall be demonstrated by multiplying the maximum tons charged per hour by the emission factor of 0.03 pounds/ton (AP-42 Section 13.2.4, dated 1/95).

   b. Emission Limitation:

      3.1 tpy of fugitive particulate emissions

      Applicable Compliance Method:

      Compliance shall be demonstrated by multiplying the maximum tons charged per hour by the emission factor of 0.03 pounds/ton (AP-42 Section 13.2.4, dated 1/95) times the hours of operation per year divided by 2,000 pounds/ton.

   b. Emission Limitation:

      20% opacity as a 3-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.

F. Miscellaneous Requirements

None.

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PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P906 - Disamatic #1 Mold Making, Pouring, Cooling, and Shakeout controlled with the Foundry/Melt Dust Collector (FMDC) baghouse, the East Foundry Dust Collector (EFDC) baghouse, and the Sand System Dust Collector (SSDC) baghouse - Modification to identify line of mold making, pouring, cooling, and shakeout as one emissions unit	OAC rule 3745-17-11	The emission limitation established pursuant to this rule is less stringent than the emission limitation established pursuant to 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 3745-31-05(A)(3).
	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-11 and 3745-17-07(A). 0.015 gr/dscf of particulate emissions from the FMDC baghouse 0.015 gr/dscf of particulate emissions from the EFDC baghouse 0.015 gr/dscf of particulate emissions from the SSDC baghouse 2.61 lbs/hr and 6.8 tpy of fugitive particulate emissions 3.0 lbs/hr and 9.4 tpy of volatile organic compounds (VOC) from pouring (See A.2.a. and b. below) 3.0 lbs/hr and 7.8 tpy of VOC from cooling (See A.2.a. and b. below)

	See A.2.b and A.2.c below.

2. Additional Terms and Conditions

2.a The hourly VOC emissions limitations were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit. The VOC emissions rates were submitted by OSCO Industries and were calculated using the results of the October 7th & 8th, 1997, U. S. EPA Method 25A tests performed on the FMDC and EFDC baghouses.

2.b Total emissions from the FMDC baghouse of all sources vented to the baghouse shall not exceed 24.6 tpy of particulate emissions. Total emissions from the EFDC baghouse of all sources vented to the baghouse shall not exceed 15.7 tpy of particulate emissions. Total emissions from the SSDC baghouse of all sources vented to the baghouse shall not exceed 15.7 tpy of particulate emissions. The PM/PM_{10} emissions from the two roof vents shall not exceed 1.92 lbs/hour each.

2.c There shall be no visible particulate emissions from the baghouse stacks. There shall be no visible fugitive particulate emissions from building openings (such as roof vents, doors, etc.).

2.d If any additional sources are vented to the FMDC, SSDC, and/or the EFDC baghouses, each dust collector's allowable rate shall remain at 0.015 grains per dry standard cubic foot of exhaust gases.

The following sources vent to the FMDC:	P005, P906 (pouring), P009, P910 (pouring), P012, P014, P915, P916, P917
The following sources vent to the EFDC:	P906 (shakeout), P908, P910 (shakeout)
The following sources vent to the SSDC:	P903, P906 (cooling), P910 (cooling), P918

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 Ohio Administrative Code (OAC) rule 3745-31-01.

B. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 5,200 hours, based upon a rolling, 12-month summation of the operating hours. The permittee shall comply with the rolling 12-month operating hours limitation immediately upon startup under this permit based on past records of monthly operating hours.

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

3. Any sources venting to the FMDC, SSDC, WCC and/or the EFDC baghouse(s) shall not operate unless the respective baghouse(s) is(are) in operation. To ensure that this condition is met, sources P005, P906, P908, P009, P910, P012, P913, P014, P915, P916, P917, and P918 shall have Programmable Logic Controllers (PLC's) which are programmed to prevent the sources from operating without the FMDC, SSDC, EFDC and/or WCC in operation. If a control equipment malfunction occurs, the sources vented to the respective baghouse, shall be shut down after the cycles are completed. An audible alarm shall be sounded to notify personnel of the malfunction.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

   a. The operating hours for each month; and

   b. The rolling, 12-month summation of the operating hours.

2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the FMDC, EFDC, and SSDC 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 weekly basis.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation.

2. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the FMDC, EFDC and/or SSDC baghouse(s) did not comply with the allowable range specified above.

3. The deviation (excursion) reports shall be submitted in accordance with Part 1 - General Terms and Conditions of this permit under section (A)(1).

E. Testing Requirements

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

   a. Emission Limitation:

      0.015 gr/dscf from the FMDC

      Applicable Compliance Method:

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

   b. Emission Limitation:

      0.015 gr/dscf from the EFDC

      Applicable Compliance Method:

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

   c. Emission Limitation:

      0.015 gr/dscf from the SSDC

      Applicable Compliance Method:

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

   d. Emission Limitation:

      2.61 lbs/hr of fugitive particulate emissions

      Applicable Compliance Method:

      Compliance shall be demonstrated by calculating the sum of (i), (ii) and (iii) below:

      i. multiply the maximum production rate for P906, in tons of sand per hour, times the particulate emission factor of 0.04 pounds/ton of sand (AP-42, Table 12.10-7, dated 1/95), times 1.0 (based on 100% fugitive emissions);

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ii. multiply the maximum production rate for P906, in tons of iron per hour, times the particulate emission factor of 4.2 pounds/ton of iron (AP-42, Table 12.10-7, dated 1/95), times 0.01 (based on 1% fugitive emissions and 99% captured emissions); and

iii. multiply the maximum production rate for P906, in tons of iron per hour, times the particulate emission factor of 3.2 pounds/ton of iron (AP-42, Table 12.10-7, dated 1/95), times 0.01 (based on 1% fugitive emissions and 99% captured emissions).

e. Emission Limitation:

6.8 tpy of fugitive particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of (i), (ii) and (iii) below:

i. multiply the maximum production rate for P906, in tons of sand per hour, times the particulate emission factor of 0.04 pounds/ton of sand (AP-42, Table 12.10-7, dated 1/95), times 1.0 (based on 100% fugitive emissions) times the actual annual hours of operation divided by 2,000 pounds/ton;

ii. multiply the maximum production rate for P906, in tons of iron per hour, times the particulate emission factor of 4.2 pounds/ton of iron (AP-42, Table 12.10-7, dated 1/95), times 0.01 (based on 1% fugitive emissions and 99% captured emissions) times the actual annual hours of operation divided by 2,000 pounds/ton; and

iii. multiply the maximum production rate for P906, in tons of iron per hour, times the particulate emission factor of 3.2 pounds/ton of iron (AP-42, Table 12.10-7, dated 1/95), times 0.01 (based on 1% fugitive emissions and 99% captured emissions) times the actual annual hours of operation divided by 2,000 pounds/ton.

f. Emission Limitation:

3.0 lbs/hr of VOC from pouring

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Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures in 40 CFR Part 60, Method 25A for the VOC emissions vented to the FMDC baghouse.

g. Emission Limitation:

9.4 tpy of VOC from pouring

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the hourly VOC emission rate from the FMDC baghouse, as measured during the most recent stack test, times the actual annual hours of operation divided by 2,000 pounds/ton.

h. Emission Limitation:

3.0 lbs/hr of VOC from cooling

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures in 40 CFR Part 60, Method 25A for the VOC emissions vented to the EFDC baghouse.

i. Emission Limitation:

7.8 tpy of VOC from cooling

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the hourly VOC emission rate from the EFDC baghouse, as measured during the most recent stack test, times the actual annual hours of operation divided by 2,000 pounds/ton.

j. Emission Limitation:

24.6 tpy of particulate emissions from the FMDC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the baghouse particulate emission rate (gr/dscf), as measured during the most recent stack test, times the maximum rated airflow from the baghouse (dscf/minute) times 60 minutes/hour divided by 7,000 grains/pound times the actual annual hours of operation divided by 2,000 pounds/ton.

k. Emission Limitation:

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15.7 tpy of particulate emissions from the EFDC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the baghouse particulate emission rate (gr/dscf), as measured during the most recent stack test, times the maximum rated airflow from the baghouse (dscf/minute) times 60 minutes/hour divided by 7,000 grains/pound times the actual annual hours of operation divided by 2,000 pounds/ton.

l. Emission Limitation:

15.7 tpy of particulate emissions from the SSDC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the baghouse particulate emission rate (gr/dscf), as measured during the most recent stack test, times the maximum rated airflow from the baghouse (dscf/minute) times 60 minutes/hour divided by 7,000 grains/pound times the actual annual hours of operation divided by 2,000 pounds/ton.

m. Emission Limitation

1.92 lbs/hour of PM/PM_{10} from roof vent #1
1.92 lbs/hour of PM/PM_{10} from roof vent #2

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures in 40 CFR Part 60, Method 1 through 5.

n. Emission Limitation:

no visible particulate emissions from the baghouse stacks

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 methods and procedures required in OAC rule 3745-17-03(B)(1).

o. Emission Limitation:

no visible fugitive particulate emissions from building openings

Applicable Compliance Method:

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If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 22.

F. Miscellaneous Requirements

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PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P910 - Disamatic #2 Mold Making, Pouring, Cooling, and Shakeout controlled with the Foundry/Melt Dust Collector (FMDC) baghouse, the East Foundry Dust Collector (EFDC) baghouse, and the Sand System Dust Collector (SSDC) baghouse - Modification to identify line of mold making, pouring, cooling, and shakeout as one emissions unit	OAC rule 3745-17-11	The emission limitation established pursuant to this rule is less stringent than the emission limitation established pursuant to 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 3745-31-05(A)(3).
	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-11 and 3745-17-07(A)(3). 0.015 gr/dscf of particulate emissions from the FMDC baghouse 0.015 gr/dscf of particulate emissions from the EFDC baghouse 0.015 gr/dscf of particulate emissions from the SSDC baghouse 2.61 lbs/hr and 6.8 tpy of fugitive particulate emissions 3.0 lbs/hr and 9.4 tpy of volatile organic compounds (VOC) from pouring (See A.2.a. and b. below) 3.0 lbs/hr and 7.8 tpy of VOC from cooling (See A.2.a. and b. below)

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	See A.2.b and A.2.c below.

2. Additional Terms and Conditions

2.a The hourly VOC emissions limitation was established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit. The VOC emissions rates were submitted by OSCO Industries and were calculated using the results of the October 7th & 8th, 1997, U. S. EPA Method 25A tests performed on the FMDC and EFDC baghouses.

2.b Total emissions from the FMDC baghouse of all sources vented to the baghouse shall not exceed 24.6 tpy of particulate emissions. Total emissions from the EFDC baghouse of all sources vented to the baghouse shall not exceed 15.7 tpy of particulate emissions. Total emissions from the SSDC baghouse of all sources vented to the baghouse shall not exceed 15.7 tpy of particulate emissions. The PM/PM_{10} emissions from the two roof vents shall not exceed 1.92 lbs/hour each.

2.c There shall be no visible particulate emissions from the baghouse stacks. There shall be no visible fugitive particulate emissions from building openings (such as roof vents, doors, etc.).

2.d If any additional sources are vented to the FMDC, SSDC, and/or the EFDC baghouses, each dust collector's allowable rate shall remain at 0.015 grains per dry standard cubic foot of exhaust gases.

The following sources vent to the FMDC:	P005, P906 (pouring), P009, P910 (pouring), P012, P014, P915, P916, P917
The following sources vent to the EFDC:	P906 (shakeout), P908, P910 (shakeout)
The following sources vent to the SSDC:	P903, P906 (cooling), P910 (cooling), P918

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 Ohio Administrative Code (OAC) rule 3745-31-01.

B. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 5,200 hours, based upon a rolling, 12-month summation of the operating hours. The permittee shall comply with the rolling 12-month operating hours limitation immediately upon startup under this permit based on past records of monthly operating hours.

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

3. Any sources venting to the FMDC, SSDC, WCC and/or the EFDC baghouse(s) shall not operate unless the respective baghouse(s) is(are) in operation. To ensure that this condition is met, sources P005, P906, P908, P009, P910, P012, P913, P014, P915, P916, P917, and P918 shall have Programmable Logic Controllers (PLC's) which are programmed to prevent the sources from operating without the FMDC, SSDC, EFDC and/or WCC in operation. If a control equipment malfunction occurs, the sources vented to the respective baghouse, shall be shut down after the cycles are completed. An audible alarm shall be sounded to notify personnel of the malfunction.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

   a. The operating hours for each month; and

   b. The rolling, 12-month summation of the operating hours.

2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the FMDC, EFDC, and SSDC 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 weekly basis.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation.

2. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the FMDC, EFDC and/or SSDC baghouse(s) did not comply with the allowable range specified above.

3. The deviation (excursion) reports shall be submitted in accordance with Part 1 - General Terms and Conditions of this permit under section (A)(1).

E. Testing Requirements

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

   a. Emission Limitation:

      0.015 gr/dscf from the FMDC

      Applicable Compliance Method:

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

   b. Emission Limitation:

      0.015 gr/dscf from the EFDC

      Applicable Compliance Method:

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

   c. Emission Limitation:

      0.015 gr/dscf from the SSDC

      Applicable Compliance Method:

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

   d. Emission Limitation:

      2.61 lbs/hr of fugitive particulate emissions

      Applicable Compliance Method:

      Compliance shall be demonstrated by calculating the sum of (i), (ii) and (iii) below:

      i. multiply the maximum production rate for P910, in tons of sand per hour, times the particulate emission factor of 0.04 pounds/ton of sand (AP-42, Table 12.10-7, dated 1/95), times 1.0 (based on 100% fugitive emissions);

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ii. multiply the maximum production rate for P910, in tons of iron per hour, times the particulate emission factor of 4.2 pounds/ton of iron (AP-42, Table 12.10-7, dated 1/95), times 0.01 (based on 1% fugitive emissions and 99% captured emissions); and

iii. multiply the maximum production rate for P910, in tons of iron per hour, times the particulate emission factor of 3.2 pounds/ton of iron (AP-42, Table 12.10-7, dated 1/95), times 0.01 (based on 1% fugitive emissions and 99% captured emissions).

e. Emission Limitation:

6.8 tpy of fugitive particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of (i), (ii) and (iii) below:

i. multiply the maximum production rate for P910, in tons of sand per hour, times the particulate emission factor of 0.04 pounds/ton of sand (AP-42, Table 12.10-7, dated 1/95), times 1.0 (based on 100% fugitive emissions) times the actual annual hours of operation divided by 2,000 pounds/ton;

ii. multiply the maximum production rate for P910, in tons of iron per hour, times the particulate emission factor of 4.2 pounds/ton of iron (AP-42, Table 12.10-7, dated 1/95), times 0.01 (based on 1% fugitive emissions and 99% captured emissions) times the actual annual hours of operation divided by 2,000 pounds/ton; and

iii. multiply the maximum production rate for P910, in tons of iron per hour, times the particulate emission factor of 3.2 pounds/ton of iron (AP-42, Table 12.10-7, dated 1/95), times 0.01 (based on 1% fugitive emissions and 99% captured emissions) times the actual annual hours of operation divided by 2,000 pounds/ton.

f. Emission Limitation:

3.0 lbs/hr of VOC from pouring

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Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures in 40 CFR Part 60, Method 25A for the VOC emissions vented to the FMDC baghouse.

g. Emission Limitation:

9.4 tpy of VOC from pouring

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the hourly VOC emission rate from the FMDC baghouse, as measured during the most recent stack test, times the actual annual hours of operation divided by 2,000 pounds/ton.

h. Emission Limitation:

3.0 lbs/hr of VOC from cooling

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures in 40 CFR Part 60, Method 25A for the VOC emissions vented to the EFDC baghouse.

i. Emission Limitation:

7.8 tpy of VOC from cooling

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the hourly VOC emission rate from the EFDC baghouse, as measured during the most recent stack test, times the actual annual hours of operation divided by 2,000 pounds/ton.

j. Emission Limitation:

24.6 tpy of particulate emissions from the FMDC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the baghouse particulate emission rate (gr/dscf), as measured during the most recent stack test, times the maximum rated airflow from the baghouse (dscf/minute) times 60 minutes/hour divided by 7,000 grains/pound times the actual annual hours of operation divided by 2,000 pounds/ton.

k. Emission Limitation:

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15.7 tpy of particulate emissions from the EFDC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the baghouse particulate emission rate (gr/dscf), as measured during the most recent stack test, times the maximum rated airflow from the baghouse (dscf/minute) times 60 minutes/hour divided by 7,000 grains/pound times the actual annual hours of operation divided by 2,000 pounds/ton.

l. Emission Limitation:

15.7 tpy of particulate emissions from the SSDC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the baghouse particulate emission rate (gr/dscf), as measured during the most recent stack test, times the maximum rated airflow from the baghouse (dscf/minute) times 60 minutes/hour divided by 7,000 grains/pound times the actual annual hours of operation divided by 2,000 pounds/ton.

m. Emission Limitation

1.92 lbs/hour of PM/PM_{10} from roof vent #1
1.92 lbs/hour of PM/PM_{10} from roof vent #2

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures in 40 CFR Part 60, Method 1 through 5.

n. Emission Limitation:

no visible particulate emissions from the baghouse stacks

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 methods and procedures required in OAC rule 3745-17-03(B)(1).

o. Emission Limitation:

no visible fugitive particulate emissions from building openings

Applicable Compliance Method:

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If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 22.

F. Miscellaneous Requirements

None.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P913 - Electric Holding Furnace controlled with the Foundry/Melt Dust Collector (FMDC) baghouse and the Wheelabrator Cartridge Collector (WCC) baghouse - Modification to increase rate to 33 tons of iron per hour	OAC rule 3745-17-11	The emission limitation established pursuant to this rule is less stringent than the emission limitation established pursuant to 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 3745-31-05(A)(3).
	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-11 and 3745-17-07(A)(3). 0.015 gr/dscf of particulate emissions from the FMDC baghouse 0.015 gr/dscf of particulate emissions from the WCC baghouse 0.59 lbs/hr and 1.9 tpy of fugitive particulate emissions See A.2.a and A.2.b below.

2. Additional Terms and Conditions

2.a Total emissions from the FMDC baghouse of all sources vented to the baghouse shall not exceed 24.6 tpy of particulate emissions. Total emissions from the WCC baghouse of all

sources vented to the baghouse shall not exceed 15.1 tpy of particulate emissions. The PM/PM_{10} emissions from the two roof vents shall not exceed 1.92 lbs/hour each.

2.b There shall be no visible particulate emissions from the baghouse stacks. There shall be no visible fugitive particulate emissions from building openings (such as roof vents, doors, etc.).

2.c If any additional sources are vented to the FMDC and/or the WCC baghouses, each dust collector's allowable rate shall remain at 0.015 grains per dry standard cubic foot of exhaust gases.

The following sources vent to the WCC:	P908, P913, P915, P916, P917
The following sources vent to the FMDC:	P005, P906 (pouring), P009, P910 (pouring), P012, P014, P915, P916, P917

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 Ohio Administrative Code (OAC) rule 3745-31-01.

B. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 6,240 hours, based upon a rolling, 12-month summation of the operating hours. This emissions unit holds molten iron 8,760 hours/year; however, the transferring of the molten iron from the electric induction furnaces to the holding furnace and from the holding furnace to the ladles for pouring is limited to 6,240 hours/year. When transferring, the holding furnace is vented to the FMDC and WCC baghouses. During non-pouring hours the openings on the holding furnace shall be covered. The permittee shall comply with the rolling 12-month operating hours limitation immediately upon startup under this permit based on past records of monthly operating hours.

2. The pressure drop across the FMDC baghouse shall be maintained within the range of 2 to 9 inches of water while the emissions unit is in operation. The pressure drop across the WCC baghouse shall be maintained within the range of 4 to 12 inches of water while the emissions unit is in operation.

3. Any sources venting to the FMDC, SSDC, WCC and/or the EFDC baghouse(s) shall not operate unless the respective baghouse(s) is(are) in operation. To ensure that this condition is met, sources P005, P906, P908, P009, P910, P012, P913, P014, P915, P916, P917, and P918 shall have

Programmable Logic Controllers (PLC's) which are programmed to prevent the sources from operating without the FMDC, SSDC, EFDC and/or WCC in operation. If a control equipment malfunction occurs, the sources vented to the respective baghouse, shall be shut down after the cycles are completed. An audible alarm shall be sounded to notify personnel of the malfunction.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

   a. The operating hours for each month; and

   b. The rolling, 12-month summation of the operating hours.

2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the FMDC and WCC 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 weekly basis.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation.

2. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the FMDC and/or WCC baghouse(s) did not comply with the allowable range specified above.

3. The deviation (excursion) reports shall be submitted in accordance with Part 1 - General Terms and Conditions of this permit under section (A)(1).

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for the WCC and FMDC in accordance with the following requirements:

   a. The emission testing shall be conducted for the FMDC and WCC baghouses within 60 days of achieving a melt rate of 25 tons per hour and within 60 days of achieving a melt rate of 33 tons per hour from emissions unit P913.

   b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates from the baghouse(s) and the allowable mass emission rate for particulates from this emissions unit based on OAC rule 3745-17-11.

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): U. S. EPA Method 5, 40 CFR Part 60, Appendix A.

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Alternative U. S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted for the FMDC and WCC baghouses simultaneously at worst case operations. Worst case operations for the FMDC and WCC includes:

i. the three electric induction furnaces operating at or near maximum melt rates; and

ii. all sources venting to the FMDC and WCC baghouses operating at rates which support the maximum melt rate of the three furnaces (emissions units: P916, P917, and P915).

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.

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

a. Emission Limitation:

0.015 gr/dscf from the FMDC

Applicable Compliance Method:

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

b. Emission Limitation:

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0.015 gr/dscf from the WCC

Applicable Compliance Method:

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

c. Emission Limitation:

0.59 lbs/hr of fugitive particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum production rate, in tons/hour, times the particulate emission factor of 0.09 pound/ton (based on holding only EPA , no melting, per SEDO letter dated 4/17/96), times 0.20 (based on 20% fugitive emissions and 80% captured emissions).

d. Emission Limitation:

1.9 tpy of fugitive particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum production rate, in tons/hour, times the particulate emission factor of 0.09 pound/ton (based on holding only EPA , no melting, per SEDO letter dated 4/17/96), times 0.20 (based on 20% fugitive emissions and 80% captured emissions) times the actual annual hours of operation divided by 2,000 pounds/ton.

e. Emission Limitation:

24.6 tpy of particulate emissions from the FMDC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the grains/dry standard cubic foot (gr/dscf) as measured in the most recent stack test times the maximum rated airflow from the baghouse, in dscf/minute, times 60 minutes/hour divided by 7,000 grains/pound times the hours of operation per year divided by 2,000 pounds/ton.

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f. Emission Limitation:

15.1 tpy of particulate emissions from the WCC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the grains/dry standard cubic foot (gr/dscf) as measured in the most recent stack test times the maximum rated airflow from the baghouse, in dscf/minute, times 60 minutes/hour divided by 7,000 grains/pound times the hours of operation per year divided by 2,000 pounds/ton.

g. Emission Limitation:

1.92 lbs/hour of PM/PM_{10} from roof vent #1
1.92 lbs/hour of PM/PM_{10} from roof vent #2

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures in 40 CFR Part 60, Method 1 through 5, and the methods and procedures required in OAC rule 3745-17-03(B)(10).

h. Emission Limitation:

no visible particulate emissions from the baghouse stacks

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 methods and procedures required in OAC rule 3745-17-03(B)(1).

i. Emission Limitation:

no visible fugitive particulate emissions from building openings

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 22.

F. Miscellaneous Requirements

None.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P915 - Electric Induction Furnace C controlled with the Foundry/Melt Dust Collector (FMDC) baghouse and the Wheelabrator Cartridge Collector (WCC) baghouse - New installation of furnace C (33 tons of iron per hour melt rate for furnaces A, B, and C combined)	OAC rule 3745-17-11	The emission limitation established pursuant to this rule is less stringent than the emission limitation established pursuant to 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 3745-31-05(A)(3).
	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-11 and 3745-17-07(A)(3). 0.015 gr/dscf of particulate emissions from the FMDC baghouse 0.015 gr/dscf of particulate emissions from the WCC baghouse 0.50 lbs/hr and 1.6 tpy of fugitive particulate emissions See A.2.a and A.2.b below.

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2. Additional Terms and Conditions

2.a Total emissions from the FMDC baghouse of all sources vented to the baghouse shall not exceed 24.6 tpy of particulate emissions. Total emissions from the WCC baghouse of all sources vented to the baghouse shall not exceed 15.1 tpy of particulate emissions. The PM/PM_{10} emissions from the two roof vents shall not exceed 1.92 lbs/hour each.

2.b There shall be no visible particulate emissions from the baghouse stacks. There shall be no visible fugitive particulate emissions from building openings (such as roof vents, doors, etc.).

2.c If any additional sources are vented to the FMDC and/or the WCC baghouses, each dust collector's allowable rate shall remain at 0.015 grains per dry standard cubic foot of exhaust gases.

The following sources vent to the WCC:	P908, P913, P915, P916, P917
The following sources vent to the FMDC:	P005, P906 (pouring), P009, P910 (pouring), P012, P014, P915, P916, P917

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 Ohio Administrative Code (OAC) rule 3745-31-01.

B. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 6,240 hours, based upon a rolling, 12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the operating hours levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Operating Hours
1	520
1-2	1040
1-3	1560

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1-4	2080
1-5	2600
1-6	3120
1-7	3640
1-8	4160
1-9	4680
1-10	5200
1-11	5720
1-12	6240

After the first 12 calendar months of operation, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

2. The pressure drop across the FMDC baghouse shall be maintained within the range of 2 to 9 inches of water while the emissions unit is in operation. The pressure drop across the WCC baghouse shall be maintained within the range of 4 to 12 inches of water while the emissions unit is in operation.

3. Any sources venting to the FMDC, SSDC, WCC and/or the EFDC baghouse(s) shall not operate unless the respective baghouse(s) is(are) in operation. To ensure that this condition is met, sources P005, P906, P908, P009, P910, P012, P913, P014, P915, P916, P917, and P918 shall have Programmable Logic Controllers (PLC's) which are programmed to prevent the sources from operating without the FMDC, SSDC, EFDC and/or WCC in operation. If a control equipment malfunction occurs, the sources vented to the respective baghouse, shall be shut down after the cycles are completed. An audible alarm shall be sounded to notify personnel of the malfunction.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

   a. The operating hours for each month; and

   b. The rolling, 12-month summation of the operating hours.

   Also, during the first 12 calendar months of operation, the permittee shall record the cumulative operating hours for each calendar month.

2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the FMDC and WCC 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 weekly basis.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative operating hours levels.

2. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the FMDC and/or WCC baghouse(s) did not comply with the allowable range specified above.

3. The deviation (excursion) reports shall be submitted in accordance with Part 1 - General Terms and Conditions of this permit under section (A)(1).

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for the WCC and FMDC in accordance with the following requirements:

   a. The emission testing shall be conducted for the FMDC and WCC baghouses within 60 days of achieving a melt rate of 25 tons per hour and within 60 days of achieving a melt rate of 33 tons per hour from emissions unit P915.

   b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates from the baghouse(s) and the allowable mass emission rate for particulates from this emissions unit based on OAC rule 3745-17-11.

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): U. S. EPA Method 5, 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 for the FMDC and WCC baghouses simultaneously at worst case operations. Worst case operations for the FMDC and WCC includes:

      i. the three electric induction furnaces operating at or near maximum melt rates; and

      ii. all sources venting to the FMDC and WCC baghouses operating at rates which support the maximum melt rate of the three furnaces (emissions units: P916, P917, and P915).

   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).

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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.

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

a. Emission Limitation:

0.015 gr/dscf from the FMDC

Applicable Compliance Method:

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

b. Emission Limitation:

0.015 gr/dscf from the WCC

Applicable Compliance Method:

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

c. Emission Limitation:

0.50 lbs/hr of fugitive particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum production rate, in tons/hour, times the particulate emission factor of 1.0 pound/ton (EPA 340/1-80-020, dated 1981), times 0.05 (based on 5% fugitive emissions and 95% captured emissions).

d. Emission Limitation:

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1.6 tpy of fugitive particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum production rate, in tons/hour, times the particulate emission factor of 1.0 pound/ton (EPA 340/1-80-020, dated 1981), times 0.05 (based on 5% fugitive emissions and 95% captured emissions) times the hours of operation per year divided by 2,000 pounds/ton.

e. Emission Limitation:

24.6 tpy of particulate emissions from the FMDC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the grains/dry standard cubic foot (gr/dscf) as measured in the most recent stack test times the maximum rated airflow from the baghouse, in dscf/minute, times 60 minutes/hour divided by 7,000 grains/pound times the hours of operation per year divided by 2,000 pounds/ton.

f. Emission Limitation:

15.1 tpy of particulate emissions from the WCC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the grains/dry standard cubic foot (gr/dscf) as measured in the most recent stack test times the maximum rated airflow from the baghouse, in dscf/minute, times 60 minutes/hour divided by 7,000 grains/pound times the hours of operation per year divided by 2,000 pounds/ton.

g. Emission Limitation:

1.92 lbs/hour of PM/PM_{10} from roof vent #1
1.92 lbs/hour of PM/PM_{10} from roof vent #2

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures in 40 CFR Part 60, Method 1 through 5, and the methods and procedures required in OAC rule 3745-17-03(B)(10).

h. Emission Limitation:

no visible particulate emissions from the baghouse stacks

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 methods and procedures required in OAC rule 3745-17-03(B)(1).

i. Emission Limitation:

no visible fugitive particulate emissions from building openings

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 22.

F. Miscellaneous Requirements

None.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P918 - Sand Muller System controlled with the Sand System Dust Collector baghouse (SSDC) - Modification to identify sand muller as a separate emissions unit	OAC rule 3745-17-11	The emission limitation established pursuant to this rule is less stringent than the emission limitation established pursuant to 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 3745-31-05(A)(3).
	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-11 and 3745-17-07(A)(3). 0.015 gr/dscf of particulate emissions from the SSDC baghouse 1.17 lbs/hr and 3.1 tpy of fugitive particulate emissions See A.2.a and A.2.b below.

2. Additional Terms and Conditions

2.a Total emissions from the SSDC baghouse of all sources vented to the baghouse shall not exceed 15.7 tpy of particulate emissions. The PM/PM_{10} emissions from the two roof vents shall not exceed 1.92 lbs/hour each.

2.b There shall be no visible particulate emissions from the baghouse stacks. There shall be no visible fugitive particulate emissions from building openings (such as roof vents, doors, etc.).

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2.c If any additional sources are vented to the SSDC baghouse, the dust collector's allowable rate shall remain at 0.015 grains per dry standard cubic foot of exhaust gases.

The following sources vent to the SSDC: P903, P906 (cooling), P910 (cooling), P918

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 Ohio Administrative Code (OAC) rule 3745-31-01.

B. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 5,200 hours, based upon a rolling, 12-month summation of the operating hours.

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

3. Any sources venting to the FMDC, SSDC, WCC and/or the EFDC baghouse(s) shall not operate unless the respective baghouse(s) is(are) in operation. To ensure that this condition is met, sources P005, P906, P908, P009, P910, P012, P913, P014, P915, P916, P917, and P918 shall have Programmable Logic Controllers (PLC's) which are programmed to prevent the sources from operating without the FMDC, SSDC, EFDC and/or WCC in operation. If a control equipment malfunction occurs, the sources vented to the respective baghouse, shall be shut down after the cycles are completed. An audible alarm shall be sounded to notify personnel of the malfunction.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

   a. The operating hours for each month; and

   b. The rolling, 12-month summation of the operating hours.

2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the SSDC baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's

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recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on weekly basis.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation.

2. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

3. The deviation (excursion) reports shall be submitted in accordance with Part 1 - General Terms and Conditions of this permit under section (A)(1).

E. Testing Requirements

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

   a. Emission Limitation:

      0.015 gr/dscf from the SSDC

      Applicable Compliance Method:

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

   b. Emission Limitation:

      1.17 lbs/hr of fugitive particulate emissions

      Applicable Compliance Method:

      Compliance shall be demonstrated by multiplying the maximum production rate, in tons of sand per hour, times the particulate emission factor of 1.3 pounds/ton of sand (EPA 340-1-80-020, dated January 1981), times 0.01 (based on 1% fugitive emissions and 99% captured emissions).

   c. Emission Limitation:

      3.1 tpy of fugitive particulate emissions

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Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum production rate, in tons of sand per hour, times the particulate emission factor of 1.3 pounds/ton of sand (EPA 340-1-80-020, dated January 1981), times 0.01 (based on 1% fugitive emissions and 99% captured emissions) times the actual annual hours of operation divided by 2,000 pounds/ton.

d. Emission Limitation:

15.7 tpy of particulate emissions from the SSDC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the grains/dry standard cubic foot (gr/dscf) as measured in the most recent stack test times the maximum rated airflow from the baghouse, in dscf/minute, times 60 minutes/hour divided by 7,000 grains/pound times the hours of operation per year divided by 2,000 pounds/ton.

e. Emission Limitation

1.92 lbs/hour of PM/PM_{10} from roof vent #1
1.92 lbs/hour of PM/PM_{10} from roof vent #2

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures in 40 CFR Part 60, Method 1 through 5, and the methods and procedures required in OAC rule 3745-17-03(B)(10).

f. Emission Limitation:

no visible particulate emissions from the baghouse stacks

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 methods and procedures required in OAC rule 3745-17-03(B)(1).

g. Emission Limitation:

no visible fugitive particulate emissions from building openings

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 22.

F. Miscellaneous Requirements

None.

NEW SOURCE REVIEW FORM B

PTI Number: 07-00487 Facility ID: 0773010180

FACILITY NAME OSCO Industries, New Boston Division

FACILITY DESCRIPTION Gray Iron Foundry CITY/TWP New Boston

SIC CODE 3321 SCC CODE 30400303 EMISSIONS UNIT ID P916

EMISSIONS UNIT DESCRIPTION Electric Induction Furnace A - Modification to increase melt rate to 33 tons per hour from furnaces A, B, and C combined

DATE INSTALLED Jan 1997

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	FMDC 0.015 gr/dscf WCC 0.015 gr/dscf fugitive 0.50 lb/hr	FMDC 24.6 tpy WCC 15.1 tpy fugitive 1.6 tpy	FMDC 0.015 gr/dscf WCC 0.015 gr/dscf fugitive 0.50 lb/hr	FMDC 24.6 tpy WCC 15.1 tpy fugitive 1.6 tpy
PM_{10}	attainment	FMDC 0.015 gr/dscf WCC 0.015 gr/dscf fugitive 0.50 lb/hr	FMDC 24.6 tpy WCC 15.1 tpy fugitive 1.6 tpy	FMDC 0.015 gr/dscf WCC 0.015 gr/dscf fugitive 0.50 lb/hr	FMDC 24.6 tpy WCC 15.1 tpy fugitive 1.6 tpy
Sulfur Dioxide	attainment	None	None	None	None
Organic Compounds	attainment	None	None	None	None
Nitrogen Oxides	attainment	None	None	None	None
Carbon Monoxide	attainment	None	None	None	None
Lead	NA	None	None	None	None
Other: Air Toxics	NA	None	None	None	None

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination - 95% capture vented to a baghouse which meets 0.015 gr/dscf

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: 07-00487 Facility ID: 0773010180

FACILITY NAME OSCO Industries, New Boston Division

FACILITY DESCRIPTION Gray Iron Foundry CITY/TWP New Boston

SIC CODE 3321 SCC CODE 30400303 EMISSIONS UNIT ID P917

EMISSIONS UNIT DESCRIPTION Electric Induction Furnace B - Modification to increase melt rate to 33 tons per hour from furnaces A, B, and C combined

DATE INSTALLED Jan 1997

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	FMDC 0.015 gr/dscf WCC 0.015 gr/dscf fugitive 0.50 lb/hr	FMDC 24.6 tpy WCC 15.1 tpy fugitive 1.6 tpy	FMDC 0.015 gr/dscf WCC 0.015 gr/dscf fugitive 0.50 lb/hr	FMDC 24.6 tpy WCC 15.1 tpy fugitive 1.6 tpy
PM_{10}	attainment	FMDC 0.015 gr/dscf WCC 0.015 gr/dscf fugitive 0.50 lb/hr	FMDC 24.6 tpy WCC 15.1 tpy fugitive 1.6 tpy	FMDC 0.015 gr/dscf WCC 0.015 gr/dscf fugitive 0.50 lb/hr	FMDC 24.6 tpy WCC 15.1 tpy fugitive 1.6 tpy
Sulfur Dioxide	attainment	None	None	None	None
Organic Compounds	attainment	None	None	None	None
Nitrogen Oxides	attainment	None	None	None	None
Carbon Monoxide	attainment	None	None	None	None
Lead	NA	None	None	None	None
Other: Air Toxics	NA	None	None	None	None

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination - 95% capture vented to a baghouse which meets 0.015 gr/dscf

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: 07-00487 Facility ID: 0773010180

FACILITY NAME OSCO Industries, New Boston Division

FACILITY DESCRIPTION Gray Iron Foundry CITY/TWP New Boston

SIC CODE 3321 SCC CODE 30400315 EMISSIONS UNIT ID F004

EMISSIONS UNIT DESCRIPTION Charge Handling - Modification to increase maximum process rate to 33 tons per hour

DATE INSTALLED Jan 1997

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	fugitive 0.99 lb/hr	fugitive 3.1 tpy	fugitive 0.99 lb/hr	fugitive 3.1 tpy
PM_{10}	attainment	fugitive 0.99 lb/hr	fugitive 3.1 tpy	fugitive 0.99 lb/hr	fugitive 3.1 tpy
Sulfur Dioxide	attainment	None	None	None	None
Organic Compounds	attainment	None	None	None	None
Nitrogen Oxides	attainment	None	None	None	None
Carbon Monoxide	attainment	None	None	None	None
Lead	NA	None	None	None	None
Other: Air Toxics	NA	None	None	None	None

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination - partial enclosure of charge handling

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: 07-00487 Facility ID: 0773010180

FACILITY NAME OSCO Industries, New Boston Division

FACILITY DESCRIPTION Gray Iron Foundry CITY/TWP New Boston

SIC CODE 3321 SCC CODE 30400320, 30400325, 30400331 EMISSIONS UNIT ID P906

EMISSIONS UNIT DESCRIPTION Disamatic #1: Mold Making, Pouring, Cooling, and Shakeout

DATE INSTALLED Jan 1997

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	FMDC 0.015gr/dscf SSDC 0.015gr/dscf EFDC 0.015gr/dscf fugitive 2.61 lb/hr	FMDC 24.6 tpy SSDC 15.7 tpy EFDC 15.7 tpy fugitive 6.8 tpy	FMDC 0.015gr/dscf SSDC 0.015gr/dscf EFDC 0.015gr/dscf fugitive 2.61 lb/hr	FMDC 24.6 tpy SSDC 15.7 tpy EFDC 15.7 tpy fugitive 6.8 tpy
PM_{10}	attainment	FMDC 0.015gr/dscf SSDC 0.015gr/dscf EFDC 0.015gr/dscf fugitive 2.61 lb/hr	FMDC 24.6 tpy SSDC 15.7 tpy EFDC 15.7 tpy fugitive 6.8 tpy	FMDC 0.015gr/dscf SSDC 0.015gr/dscf EFDC 0.015gr/dscf fugitive 2.61 lb/hr	FMDC 24.6 tpy SSDC 15.7 tpy EFDC 15.7 tpy fugitive 6.8 tpy
Sulfur Dioxide	attainment	None	None	None	None
Organic Compounds	attainment	lb/hr	tpy	lb/hr	tpy
Nitrogen Oxides	attainment	None	None	None	None
Carbon Monoxide	attainment	None	None	None	None
Lead	NA	None	None	None	None
Other: Air Toxics	NA	None	None	None	None

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination - 99% capture of pouring, cooling, and shakeout vented to a baghouse which meets 0.015 gr/dscf

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: 07-00487 Facility ID: 0773010180

FACILITY NAME OSCO Industries, New Boston Division

FACILITY DESCRIPTION Gray Iron Foundry CITY/TWP New Boston

SIC CODE 3321 SCC CODE 30400320, 30400325, 30400331 EMISSIONS UNIT ID P910

EMISSIONS UNIT DESCRIPTION Disamatic #2: Mold Making, Pouring, Cooling, and Shakeout

DATE INSTALLED Mar 1998

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	FMDC 0.015gr/dscf SSDC 0.015gr/dscf EFDC 0.015gr/dscf fugitive 2.61 lb/hr	FMDC 24.6 tpy SSDC 15.7 tpy EFDC 15.7 tpy fugitive 6.8 tpy	FMDC 0.015gr/dscf SSDC 0.015gr/dscf EFDC 0.015gr/dscf fugitive 2.61 lb/hr	FMDC 24.6 tpy SSDC 15.7 tpy EFDC 15.7 tpy fugitive 6.8 tpy
PM_{10}	attainment	FMDC 0.015gr/dscf SSDC 0.015gr/dscf EFDC 0.015gr/dscf fugitive 2.61 lb/hr	FMDC 24.6 tpy SSDC 15.7 tpy EFDC 15.7 tpy fugitive 6.8 tpy	FMDC 0.015gr/dscf SSDC 0.015gr/dscf EFDC 0.015gr/dscf fugitive 2.61 lb/hr	FMDC 24.6 tpy SSDC 15.7 tpy EFDC 15.7 tpy fugitive 6.8 tpy
Sulfur Dioxide	attainment	None	None	None	None
Organic Compounds	attainment	lb/hr	tpy	lb/hr	tpy
Nitrogen Oxides	attainment	None	None	None	None
Carbon Monoxide	attainment	None	None	None	None
Lead	NA	None	None	None	None
Other: Air Toxics	NA	None	None	None	None

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination - 99% capture of pouring, cooling, and shakeout vented to a baghouse which meets 0.015 gr/dscf

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: 07-00487 Facility ID: 0773010180

FACILITY NAME OSCO Industries, New Boston Division

FACILITY DESCRIPTION Gray Iron Foundry CITY/TWP New Boston

SIC CODE 3321 SCC CODE 30400303 EMISSIONS UNIT ID P913

EMISSIONS UNIT DESCRIPTION Electric Holding Furnace - Modification to increase maximum process rate to 33 tons of iron per hour

DATE INSTALLED Mar 1998

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	WCC 0.015 gr/dscf fugitive 0.59 lb/hr	WCC 15.1 tpy fugitive 1.9 tpy	WCC 0.015 gr/dscf fugitive 0.59 lb/hr	WCC 15.1 tpy fugitive 1.9 tpy
PM_{10}	attainment	WCC 0.015 gr/dscf fugitive 0.59 lb/hr	WCC 15.1 tpy fugitive 1.9 tpy	WCC 0.015 gr/dscf fugitive 0.59 lb/hr	WCC 15.1 tpy fugitive 1.9 tpy
Sulfur Dioxide	attainment	None	None	None	None
Organic Compounds	attainment	None	None	None	None
Nitrogen Oxides	attainment	None	None	None	None
Carbon Monoxide	attainment	None	None	None	None
Lead	NA	None	None	None	None
Other: Air Toxics	NA	None	None	None	None

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination - 80% capture vented to a baghouse which meets 0.015 gr/dscf

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: 07-00487 Facility ID: 0773010180

FACILITY NAME OSCO Industries, New Boston Division

FACILITY DESCRIPTION Gray Iron Foundry CITY/TWP New Boston

SIC CODE 3321 SCC CODE 30400303 EMISSIONS UNIT ID P915

EMISSIONS UNIT DESCRIPTION Electric Induction Furnace C - melt rate is 33 tons per hour from furnaces A, B, and C combined

DATE INSTALLED Estimate May 2000

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	FMDC 0.015 gr/dscf WCC 0.015 gr/dscf fugitive 0.50 lb/hr	FMDC 24.6 tpy WCC 15.1 tpy fugitive 1.6 tpy	FMDC 0.015 gr/dscf WCC 0.015 gr/dscf fugitive 0.50 lb/hr	FMDC 24.6 tpy WCC 15.1 tpy fugitive 1.6 tpy
PM_{10}	attainment	FMDC 0.015 gr/dscf WCC 0.015 gr/dscf fugitive 0.50 lb/hr	FMDC 24.6 tpy WCC 15.1 tpy fugitive 1.6 tpy	FMDC 0.015 gr/dscf WCC 0.015 gr/dscf fugitive 0.50 lb/hr	FMDC 24.6 tpy WCC 15.1 tpy fugitive 1.6 tpy
Sulfur Dioxide	attainment	None	None	None	None
Organic Compounds	attainment	None	None	None	None
Nitrogen Oxides	attainment	None	None	None	None
Carbon Monoxide	attainment	None	None	None	None
Lead	NA	None	None	None	None
Other: Air Toxics	NA	None	None	None	None

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination - 95% capture vented to a baghouse which meets 0.015 gr/dscf

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: 07-00487 Facility ID: 0773010180

FACILITY NAME OSCO Industries, New Boston Division

FACILITY DESCRIPTION Gray Iron Foundry CITY/TWP New Boston

SIC CODE 3321 SCC CODE 30400352 EMISSIONS UNIT ID P918

EMISSIONS UNIT DESCRIPTION Sand Muller System

DATE INSTALLED Jan 1997

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	SSDC 0.015 gr/dscf fugitive 1.17 lb/hr	SSDC 15.7 tpy fugitive 3.1 tpy	SSDC 0.015 gr/dscf fugitive 1.17 lb/hr	SSDC 15.7 tpy fugitive 3.1 tpy
PM_{10}	attainment	SSDC 0.015 gr/dscf fugitive 1.17 lb/hr	SSDC 15.7 tpy fugitive 3.1 tpy	SSDC 0.015 gr/dscf fugitive 1.17 lb/hr	SSDC 15.7 tpy fugitive 3.1 tpy
Sulfur Dioxide	attainment	None	None	None	None
Organic Compounds	attainment	None	None	None	None
Nitrogen Oxides	attainment	None	None	None	None
Carbon Monoxide	attainment	None	None	None	None
Lead	NA	None	None	None	None
Other: Air Toxics	NA	None	None	None	None

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination - 99% capture vented to a baghouse which meets 0.015 gr/dscf

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: 07-00487 Facility ID: 0773010180

FACILITY NAME OSCO Industries, New Boston Division

FACILITY DESCRIPTION Gray Iron Foundry CITY/TWP New Boston

Ohio EPA Permit to Install Information Form Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit hard copy items to **Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to **airpti@epa.state.oh.us**

Please fill out the following. If the checkbox does not work, replace it with an 'X'	Electronic	**Additional information** File Name Convention (your PTI # plus this letter)	Hard Copy	None
Calculations (required)	X	0700487**c**.wpd	☐	
Modeling form/results	☐	0000000**s**.wpd	☐	☐
PTI Application (complete or partial)*	☐	0000000**a**.wpd	☐	☐
BAT Study	☐	0000000**b.**wpd	☐	☐
Other/misc.	☐	0000000**t**.wpd	☐	☐

* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

NSR Discussion

Purpose of Permit to install is for the installation of a new Electric Induction Furnace, and the associated increases in the charge handling and the electric holding furnace.

The two Disa lines and the Sand Muller system have been included to establish the proper emissions unit identification. Each Disa is a continuous line including mold making, pouring, cooling, and shakeout; therefore, one emissions unit (previously three units). Please refer to page 2 of the attached calculations for a description of the emissions for Disa lines and Sand Muller.

This facility is located in Scioto County which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust control requirements and visible emissions limitations established in OAC rules 3745-17-08 and 3745-17-07(B) are not applicable to the fugitive dust emissions from this unit.

Increase of 16.04 tpy of particulate fugitive emissions
Increase of 0.6 tpy of particulate emissions from any stack
No increase of VOC emissions
No increase of particulate emissions from roof vents

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 **ENTER PTI NUMBER HERE**

A. Source Description

B. Facility Emissions and Attainment Status

C:\temp\permits3\9795.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 07-00487 Facility ID: 0773010180

FACILITY NAME OSCO Industries, New Boston Division

FACILITY DESCRIPTION Gray Iron Foundry CITY/TWP New Boston

C. Source Emissions

D. Conclusion

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:
NONE

Please complete:

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

Pollutant	Tons Per Year
particulate	stack 71.1 fugitive 26.5
OC	34.4