State of Ohio Environmental Protection Agency

STREET ADDRESS:
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Columbus, Ohio 43215

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www.epa.state.oh.us

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

7/8/2009

Certified Mail

No	TOXIC REVIEW
Yes	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
Yes	MODELING SUBMITTED

Heather Klesch
Clow Water Systems Company
P. O. Box 6001
2266 South Sixth Street
Coshocton, OH 43812-6001

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0616010006
Permit Number: 06-07432
Permit Type: OAC Chapter 3745-31 Modification
County: Coshocton

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of $70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

The Ohio EPA is encouraging 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 Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Southeast District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page http://www.epa.state.oh.us/dapc.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA DAPC, Southeast District Office

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

FINAL

Air Pollution Permit-to-Install

for

Clow Water Systems Company

Facility ID: 0616010006
Permit Number: 06-07432
Permit Type: OAC Chapter 3745-31 Modification
Issued: 7/8/2009
Effective: 7/8/2009

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Permit-to-Install
for
Clow Water Systems Company

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Authorization

Facility ID: 0616010006
Facility Description: Ductile Iron Pipe and Fittings.
Application Number(s): A0006231
Permit Number: 06-07432
Permit Description: PSD permit for emissions increases resulting from modifications of cupola (P901) in 1989 and 1998; includes synthetic minor restrictions for several supporting emissions units and initial installation permits for K006 and P020.
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: $8,950.00
Issue Date: 7/8/2009
Effective Date: 7/8/2009

This document constitutes issuance to:

Clow Water Systems Company
P. O. Box 6001
2266 South Sixth Street
Coshocton (Tuscarawas Twp, OH 43812-6001

Of a Permit-to-Install for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138
(740)385-8501

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section 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 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

Chris Korleski
Director

Authorization (continued)

Permit Number: 06-07432
Permit Description: PSD permit for emissions increases resulting from modifications of cupola (P901) in 1989 and 1998; includes synthetic minor restrictions for several supporting emissions units and initial installation permits for K006 and P020.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	**F007**
Company Equipment ID:	JOLT SHAKEOUT
Superseded Permit Number:	06-07603
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F014**
Company Equipment ID:	LAEMPE CORE MACHINE
Superseded Permit Number:	06-5183
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F015**
Company Equipment ID:	FOUNDRY SHOT BLAST
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F016**
Company Equipment ID:	BMM SHAKEOUT
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**K002**
Company Equipment ID:	FITTINGS PAINTING
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**K006**
Company Equipment ID:	PIPE PAINT OPERATION - SMALL LINE
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P020**
Company Equipment ID:	ANNEALING OVEN
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P901**
Company Equipment ID:	CUPOLA
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A. 2.a), Severability Clause

(2) Standard Term and Condition A. 3.c) through A. 3.e) General Requirements

(3) Standard Term and Condition A. 6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A. 9., Reporting Requirements

(5) Standard Term and Condition A. 10., Applicability

(6) Standard Term and Condition A. 11.b) through A. 11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A. 14., Public Disclosure

(8) Standard Term and Condition A. 15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A. 16., Fees

(10) Standard Term and Condition A. 17., Permit Transfers

2. Severability Clause

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

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d) This permit does not convey any property rights of any sort, or any exclusive privilege.

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Southeast District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Southeast District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Southeast District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Southeast District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

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

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

c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

d) The permittee shall submit progress reports to the Ohio EPA DAPC, Southeast District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Southeast District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Southeast District

Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. 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).

11. Construction of New Sources(s) and Authorization to Install

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

b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. 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.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed through completion of the annual PER covering the last period of operation of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted

for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the PER covering the last period the emissions unit operated.

No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a PER, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. 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.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

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

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Southeast District Office must be notified in writing of any transfer of this permit.

18. Risk Management Plans

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

19. Title IV Provisions

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

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

C. Emissions Unit Terms and Conditions

1. F007, JOLT SHAKEOUT

Operations, Property and/or Equipment Description:

Jolt shakeout vibrating table with baghouse; administrative modification to add federally-enforceable operating restrictions on throughput of fittings castings as requested by the permittee to ensure compliance with facility-wide emission rates protective of the National Ambient Air Quality Standards (NAAQS); supercedes PTI # 06-07603 issued on August 15, 2008 (EU F007 only).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) g)(2)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) from the baghouse stack serving emissions units (EUs) F004, F007 and P007 shall not exceed 0.0075 gr/dscf (5.78 lbs/hr). PE from EU F007 shall not exceed 0.38 lb/hr. Emissions of particulate matter less than 10 microns (PM_{10}) from EU F007 shall not exceed 0.26 lb/hr. Emissions of volatile organic compounds (VOC) from EU F007 shall not exceed 7.2 lbs/hr; 9.0 tons/ yr. Emissions of carbon monoxide (CO) from EUs F007 and F009, combined, shall not exceed 27.0 lbs/hr. Visible emissions of fugitive dust outside of any building orifice shall not exceed 5% opacity, as a six minute average. No visible particulate emissions shall be

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		emitted from the baghouse stack. The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD requirements)	PE from EU F007 shall not exceed 0.32 ton as a rolling, 12-month summation. PM_{10} emissions from EU F007 shall not exceed 0.22 ton as a rolling, 12-month summation. Emissions of CO from EUs F007 and F009, combined, shall not exceed 33.75 tons as a rolling, 12-month summation.
c.	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-17-07(B)	See b)(2)a. below.
f.	OAC rule 3745-17-08 (B)	See b)(2)a. below.

(2) Additional Terms and Conditions

a. This facility is located in Coshocton County, which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions from this emissions unit are exempt from the fugitive dust control requirements and visible emission limitation established in OAC rules 3745-17-08(B) and 3745-17-07(B), respectively.

c) Operational Restrictions

(1) The Jolt Line which includes Jolt Pouring and Cooling (F009), Jolt Shakeout (F007), and the Jolt Sand Plant (P007) shall be limited to the following production rates based on a rolling, 12-month summation:

a. 175,000 tons sand; and
b. 10,000 tons metal.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summations.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions outside of any building orifice serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

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

(2) The permittee shall collect and record the following information each month for this emissions unit:

a. the total throughput of sand (in tons) of this emissions unit;

b. the total throughput of metal (in tons) of this emissions unit;

c. the rolling, 12-month summation of throughput, in tons of sand (i.e., the throughput for the current month added to the throughput for the previous 11 calendar months); and,

d. the rolling, 12-month summation of throughput, in tons of metal (i.e., the throughput for the current month added to the throughput for the previous 11 calendar months).

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summations of the production rates upon issuance of this permit.

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be

noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. the total duration of any visible emission incident; and
c. any corrective actions taken to eliminate the visible emissions.

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed outside of any building orifice serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the rolling, 12-month throughput limitations specified in c)(1). The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(3) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitations for PE, PM_{10}, and CO. The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(4) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:
Particulate emissions (PE) from the baghouse stack serving emissions units (EUs) F004, F007 and P007 shall not exceed 0.0075 gr/dscf (5.78 lbs/hr).

Applicable Compliance Method:
If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources", and the procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

b. Emission Limitation:
PE from EU F007 shall not exceed 0.38 lb/hr.

Applicable Compliance Method:
Compliance with the lb/hr emission limitation shall be demonstrated using the following equations:

3.20 lbs PE per ton of metal (based on emissions factor from FIRE 6.23 SCC 3-04-003-31)
maximum rate of 6 tons of metal per hour
99% capture efficiency (based on application information)
99% baghouse control efficiency

Stack Emissions
(3.2 lbs/ton) X (6 tons/hr) = 19.2 lbs/hr uncontrolled
(19.2 lbs/hr) X (99% capture) X (99% control) = 0.19 lb/hr

Fugitive Emissions
(19.2 lbs/hr) X (1% capture loss) = 0.19 lb/hr

Total Emissions
0.19 lb/hr + 0.19 lb/hr = 0.38 lb/hr

c. Emission Limitation:
PE from EU F007 shall not exceed 0.32 ton as a rolling, 12-month summation.

Applicable Compliance Method:
Compliance with the rolling, 12-month emission limitation shall be based upon compliance with the operating restriction in c)(1)b. as demonstrated using the following equations:

3.20 lbs PE per ton of metal (based on emissions factor from FIRE 6.23 SCC 3-04-003-31)
99% capture efficiency (based on application information)
99% baghouse control efficiency

Stack Emissions
(3.20 lbs/ton) X (actual tons of metal per rolling, 12-month period as determined pursuant to d)(2)d.) X (99% capture) X (99% control) X (0.0005 ton/lb)

Fugitive Emissions
(3.20 lbs PE per ton of metal) X (actual tons of metal per rolling, 12-month period as determined pursuant to d)(2)d.) X (1% capture loss) X (0.0005 ton/lb)

Total Emissions = Stack Emissions + Fugitive Emissions

d. Emission Limitation:
Emissions of PM_{10} from EU F007 shall not exceed 0.26 lb/hr.

Applicable Compliance Method:
Compliance with the lb/hr emission limitation shall be demonstrated using the following equations:

2.24 lbs PM_{10} per ton of metal (based on emissions factor from FIRE 6.23 SCC 3-04-003-31)
maximum rate of 6 tons of metal per hour
99% capture efficiency (based on application information)
99% baghouse control efficiency

Stack Emissions
(2.24 lbs/ton) X (6 tons/hr) = 13.44 lbs/hr uncontrolled
(13.4 lbs/hr) X (99% capture) X (99% control) = 0.13 lb/hr

Fugitive Emissions
(13.4 lbs/hr) X (1% capture loss) = 0.13 lb/hr

Total Emissions
0.13 lb/hr + 0.13 lb/hr = 0.26 lb/hr

e. Emission Limitation:
PM_{10} emissions from EU F007 shall not exceed 0.22 ton as a rolling, 12-month summation.

Applicable Compliance Method:
Compliance with the rolling, 12-month emission limitation shall be based upon compliance with the operating restriction in c)(1)b. as demonstrated using the following equations:

2.24 lbs PM_{10} per ton of metal (based on emissions factor from FIRE 6.23 SCC 3-04-003-31)
99% baghouse control efficiency

Stack Emissions
(2.24 lbs/ton) X (actual tons of metal per rolling, 12-month period as determined pursuant to d)(2)d.) X (99% capture) X (99% control) X (0.0005 ton/lb)

Fugitive Emissions
(2.24 lbs/ton) X (actual tons of metal per rolling, 12-month period as determined pursuant to d)(2)d.) X (1% capture loss) X (0.0005 ton/lb)

Total Emissions = Stack Emissions + Fugitive Emissions

f. Emission Limitations:
Emissions of VOC from EU F007 shall not exceed 7.2 lbs/hr; 9.0 tons/yr.

Applicable Compliance Method:
Compliance shall be demonstrated using the following equations:

1.20 lbs VOC per ton of metal (based on emissions factor from FIRE 6.23 SCC 3-04-003-31)

maximum rate of 6 tons of metal per hour
limited to 15,000 tons of metal based on a rolling, 12-month summation uncontrolled

(1.20 lbs/ton) X (6 tons/hr) = 7.2 lbs/hr
(1.20 lbs/ton) X (15,000 tons/yr) X (0.0005 lb/ton) = 9.0 tons/yr

g. Emission Limitation:
Emissions of CO from EUs F007 and F009, combined, shall not exceed 27.0 lbs/hr.

Applicable Compliance Method:
Compliance with the lb/hr emission limitation shall be demonstrated using the following equation:

4.50 lbs CO per ton of metal (based on stack testing of a similar unit)
maximum rate of 6 tons of metal per hour

(4.50 lbs/ton) X (6 tons/hr) = 27.0 lbs/hr

h. Emission Limitation:
Emissions of CO from EUs F007 and F009, combined, shall not exceed 33.75 tons as a rolling, 12-month summation.

Applicable Compliance Method:
Compliance with the rolling, 12-month emission limitation shall be based upon compliance with the operating restriction in c)(1)b. as demonstrated using the following equations:

4.50 lbs CO per ton of metal (based on stack testing of a similar unit)
(4.50 lbs/ton) X (actual tons of metal per rolling, 12-month period as determined pursuant to d)(2)d.) X (0.0005 ton/lb)

i. Emission Limitation:
Visible emissions of fugitive dust outside of any building orifice shall not exceed 5% opacity, as a six minute average.

Applicable Compliance Method:
If required, visible particulate emissions shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources".

j. Emission Limitation:
No visible particulate emissions shall be emitted from the baghouse stack.

Applicable Compliance Method:
If required, visible particulate emissions shall be determined according to test Method 22 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" as such appendix existed on July 1, 2002.

g) Miscellaneous Requirements

(1) Particulate emissions testing as required by PTI # 06-07603, issued on December 28, 2006, was completed on April 17, 2007.

(2) Modeling to demonstrate compliance with the “Toxic Air Contaminant Statute” in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit’s maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

2. F014, LAEMPE CORE MACHINE

Operations, Property and/or Equipment Description:

Isocure machine (Laempe) with baghouse and wet scrubber; administrative modification to include a federally-enforceable emissions limitation on PM10 that was requested by the permittee to ensure compliance with facility-wide emission rates protective of the National Ambient Air Quality Standards (NAAQS); supersedes PTI # 06-05183 issued on December 29, 1999 (EU F014 only)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (Synthetic minor to ensure compliance with the NAAQS)	PM_{10} emissions from the baghouse stack shall not exceed 0.030 gr/dscf.
b.	OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) from the baghouse stack shall not exceed 0.030 gr/dscf (0.46 lb/hr) or there shall be no visible particulate emissions from this stack, whichever is less stringent. PE from the baghouse stack shall not exceed 2.03 tpy. Volatile organic compound (VOC) emissions shall not exceed 2.04 lbs/hr and 8.94 tpy.
c.	OAC rule 3745-21-07(G)	See b)(2)a. below.
d.	OAC rule 3745-17-11(B)(1)	The emission limitation established by this applicable rule is less stringent than the emission limitation established pursuant to the best available technology requirements specified in OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-17-07(A)	The emission limitation established by this applicable rule is less stringent than the emission limitation established

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		pursuant to the best available technology requirements specified in OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-17-07 (B)	See b)(2)b. below.
g.	OAC rule 3745-17-08 (B)	See b)(2)b. below.

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the requirements of OAC rule 3745-21-07(G) pursuant to OAC rule 3745-21-07(G)(9)(i) [the use of a phenolic urethane no-bake resin binder system in foundry core-making and mold-making operations]. This exemption was adopted by the Director of Ohio EPA and became effective June 15, 1999. The US EPA has agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of US EPA approval of this rule as revision to the Ohio SIP for ozone.

b. This facility is not located in an area identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions are exempt from the visible particulate emission limitation and the reasonably available control measures established in OAC rule 3745-17-07 (B) and OAC rule 3745-17-08 (B), respectively.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month periods.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
PM_{10} emissions from the baghouse stack shall not exceed 0.030 gr/dscf.

Applicable Compliance Method:
If required, PM_{10} emissions shall be determined according to 40 CFR Part 51, Appendix M, Method 201, or 40 CFR Part 51, Appendix M, 201A as appropriate. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

b. Emission Limitation:
PE from the baghouse stack shall not exceed 0.030 gr/dscf (0.46 lb/hr) or there shall be no visible particulate emissions from this stack, whichever is less stringent.

Applicable Compliance Method:
If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" or, if required, compliance with the no visible particulate emissions requirement shall be determined in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 22.

c. Emission Limitation:
PE from the baghouse stack shall not exceed 2.03 tpy.

Applicable Compliance Method:
Compliance with the annual PE emission rate of 2.03 tons is based on the hourly emission rate of 0.46 lb/hr multiplied by 8,760 hours per year, divided by 2000 pounds per ton (based on application information).

d. Emission Limitation:
VOC emissions shall not exceed 2.04 lbs/hr and 8.94 tons per year.

Applicable Compliance Method:
Compliance with the lbs/hr emission rate shall be determined by the one-time calculation of the maximum tons of sand processed in this emission unit per hour, 3 tons/hour, as provided in the permittee's application, multiplied by the VOC emission factor of 0.68 lb of VOC/ton of sand.

Compliance with the ton/yr emission rate shall be determined by the one-time calculation of the maximum tons of sand processed in this emission unit per year, 26,280, as provided in the permittee's application, multiplied by the VOC emission factor of 0.68 lb of VOC/ton of sand, divided by 2000 lbs/ton.

g) Miscellaneous Requirements

(1) PTI #06-05183 issued on December 29, 1999, contained a synthetic minor restriction on VOC emissions from this emissions unit to avoid PSD review. Even though the VOC emissions factor has increased, the emissions unit that was installed under PTI #06-05183 has a throughput capacity of 3 tons/hour instead of 5 tons/hour as proposed. As a result, the VOC synthetic minor is no longer required to ensure that the addition of emissions units F014 and K009 did not require PSD review and these requirements have been deleted.

3. F015, FOUNDRY SHOT BLAST

Operations, Property and/or Equipment Description:

Foundry shotblast with baghouse; this unit was installed in 1972 so an installation permit was not required; however, the permittee has requested federally-enforceable operating restrictions on throughput of fittings castings and emissions limitations on PM10 for this unit to ensure compliance with facility-wide emission rates protective of the National Ambient Air Quality Standards (NAAQS).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (Synthetic minor to ensure compliance with the NAAQS)	PM_{10} emissions from the baghouse stack shall not exceed 0.020 gr/dscf. PM_{10} emissions shall not exceed 8.06 tons as a rolling, 12-month summation. See c)(1) below.
b.	OAC rule 3745-17-07(B)	See b)(2)a. below.
c.	OAC rule 3745-17-08(B)	See b)(2)a. below.

(2) Additional Terms and Conditions

a. This facility is not located in an area identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions are exempt from the visible particulate emission limitation and the reasonably available control measures established in OAC rule 3745-17-07 (B) and OAC rule 3745-17-08 (B), respectively.

c) Operational Restrictions

(1) The maximum throughput of this emissions unit shall not exceed 31,000 tons of fittings castings, based on a rolling 12-month summation. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the production rate upon issuance of this permit.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. the total throughput of fittings castings (in tons) of this emissions unit; and

b. the rolling, 12-month summation of throughput of fittings castings, in tons (i.e., the throughput for the current month added to the throughput for the previous 11 calendar months).

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the production rates upon issuance of this permit.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedences of the rolling, 12-month throughput and emissions limitations specified in b)(1) and c)(1). The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
PM_{10} emissions from the baghouse stack shall not exceed 0.020 gr/dscf.

Applicable Compliance Method:
The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

i. The emission testing shall be conducted within six months after issuance of the permit.

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PM_{10}.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

(a) PM_{10} emissions shall be determined according to 40 CFR Part 51, Appendix M, Method 201, or 40 CFR Part 51, Appendix M, 201A as appropriate.

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

iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

vi. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire 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.

vii. 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 appropriate Ohio EPA District Office or 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 appropriate Ohio EPA District Office or local air agency.

b. Emission Limitation:
PM_{10} emissions shall not exceed 8.06 tons as a rolling, 12-month summation.

Applicable Compliance Method:
Compliance with the tons per rolling, 12-month period shall be based upon compliance with the operating restriction in c)(1) as demonstrated using the following equations:

Stack Emissions
tons PM_{10}/rolling, 12-month period = [(0.020 gr/dscf) X (10,700 dscf/min (flow rate of baghouse)) X (lb/7000 gr) X (60 min/hour) X (ton/2000 lbs) X 8,760 hours per year = 8.03 tons per year

Fugitive Emissions
tons PM_{10}/rolling, 12-month period = (actual tons fittings castings per rolling, 12-month period as determined pursuant to d)(1)b.) X (1.7 pounds PM_{10}/ton of fittings castings) X (1-0.999)/2,000 lbs/ton

Total Emissions = 8.03 tons/year (stack emissions) + tons PM_{10}/rolling, 2-month period (fugitive emissions)

g) Miscellaneous Requirements

(1) None.

4. F016, BMM SHAKEOUT

Operations, Property and/or Equipment Description:

BMM shakeout with baghouse; this unit was installed in 1972 so an installation permit was not required; however, the permittee has requested federally-enforceable operating restrictions on throughput of fittings castings and emissions limitations on PM10 for this unit to ensure compliance with facility-wide emission rates protective of the National Ambient Air Quality Standards (NAAQS)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (Synthetic minor to ensure compliance with the NAAQS)	PM_{10} emissions from the baghouse stack shall not exceed 0.0075 gr/dscf. PM_{10} emissions shall not exceed 25.56 tons as a rolling, 12-month summation. See c)(1) below.
b.	OAC rule 3745-17-07(B)	See b)(2)a. below.
c.	OAC rule 3745-17-08(B)	See b)(2)a. below.

(2) Additional Terms and Conditions

a. This facility is not located in an area identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions are exempt from the visible particulate emission limitation and the reasonably available control measures established in OAC rule 3745-17-07 (B) and OAC rule 3745-17-08 (B), respectively.

c) Operational Restrictions

(1) The maximum throughput of this emissions unit shall not exceed 20,000 tons of fittings castings, based on a rolling, 12-month summation. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the production rate upon issuance of this permit.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. the total throughput of fittings castings (in tons) of this emissions unit; and

b. the rolling, 12-month summation of throughput of fittings castings, in tons (i.e., the throughput for the current month added to the throughput for the previous 11 calendar months).

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the production rates upon issuance of this permit.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedences of the rolling, 12-month throughput and emissions limitations specified in b)(1) and c)(1). The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
PM_{10} emissions from the baghouse stack shall not exceed 0.0075 gr/dscf.

Applicable Compliance Method:
The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

i. the emission testing shall be conducted within six months after issuance of the permit.

ii. the emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PM_{10}.

iii. the following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

(a) PM_{10} emissions shall be determined according to 40 CFR Part 51, Appendix M, Method 201, or 40 CFR Part 51, Appendix M, 201A as appropriate.

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

iv. the test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

vi. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire 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.

vii. 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 appropriate Ohio EPA District Office or 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 appropriate Ohio EPA District Office or local air agency.

b. Emission Limitation:
PM_{10} emissions shall not exceed 25.56 tons as a rolling, 12-month summation.

Applicable Compliance Method:
Compliance with the tons per rolling, 12-month period shall be based upon compliance with the operating restriction in c)(1) as demonstrated using the following equations:

Stack Emissions
tons PM_{10}/rolling, 12-month period = (0.0075 gr/dscf) X (90,000 dscf/min (flow rate of baghouse)) X (lb/7000 gr) X (60 min/hour) X (ton/2000 lbs) X 8,760 hours per year = 25.34 tons per year

Fugitive Emissions
tons PM_{10}/rolling, 12-month period = (actual tons fittings castings per rolling, 12-month period as determined pursuant to d)(1)b.) X (2.24 pounds PM_{10}/ton of fittings castings) X (1-0.99)/2,000 lbs/tonr

Total Emissions = 25.34 tons/year (stack emissions) + tons PM_{10}/rolling, 2-month period (fugitive emissions)

g) Miscellaneous Requirements

(1) None.

5. K002, FITTINGS PAINTING

Operations, Property and/or Equipment Description:

Fittings painting operation; this unit was installed in 1965 so an installation permit was not required; however, the permittee has requested federally-enforceable emissions limitations on PM10 for this unit to ensure compliance with facility-wide emission rates protective of the National Ambient Air Quality Standards (NAAQS).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (Synthetic minor to ensure compliance with the NAAQS)	PM_{10} emissions from the stack shall not exceed 0.75 ton based on a rolling, 12-month summation.
b.	OAC rule 3745-21-09(U)(1)(d)	Volatile compound emissions per gallon of coating shall not exceed 3.5 pounds, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit.
c.	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-17-11(B)(1)	PE from the stack shall not exceed 0.551 lb/hr (from Table I).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

(2) The maximum coating usage for this emissions unit shall not exceed 7,532 gallons, based upon a rolling, 12-month summation of the coating usage figures. This emissions

unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the coating usage, upon issuance of this permit.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

(2) The permittee shall collect and record the following information each month for the coating line:

a. The name and identification number of each coating employed;

b. the solids content, in pounds per gallon, of each coating employed;

c. the VOC content of each coating (excluding water and exempt solvents), in pounds per gallon as applied;

d. the total volume, in gallons, of each coating employed;

e. the rolling, 12-month summation of the coating usage; and

f. the total solids usage [the sum of (b. times d.) for all coatings], in tons.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the coatings usage rate upon issuance of this permit.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(2) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

(3) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for PM_{10} specified in b)(1). The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(4) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on coating usage. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
PM_{10} emissions from the stack shall not exceed 0.75 ton based on a rolling, 12-month summation.

Applicable Compliance Method:
Compliance with the rolling, 12-month emissions limit shall be determined in accordance with the following method:

E = (M) * (1-TE) * (1-CE)

where:

E = PM_{10} emission rate (tons per month);
M = total coating solids usage rate (tons per month);
TE = transfer efficiency of coating equipment (ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, 0.50 per application); and
CE = control efficiency of the control equipment (0.90 for panel filters).

Compliance with the rolling, 12-month emission limit shall be determined by adding the current month to the previous 11 calendar months totals.

b. Emission Limitation:
Volatile compound emissions per gallon of coating shall not exceed 3.5 pounds, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit.

Applicable Compliance Method:
Compliance shall be demonstrated based upon the record keeping requirements specified in d)(2). Formulation data or USEPA Method 24 shall be used to determine the volatile compound contents of the coatings.

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

Applicable Compliance Method:
If required, compliance shall be determined by Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

d. Emission Limitation:
Particulate emissions from the stack shall not exceed 0.551 lb/hr(from Table I).

Applicable Compliance Method:

Compliance with the particulate emission limit shall be determined in accordance with the following method:

E = (M) * (1-TE) * (1-CE)

where:

E = particulate emission rate (in pounds per hour);
M = total coating solids usage rate (in pounds per hour);
TE = transfer efficiency of coating equipment (ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, 0.50 per application); and
CE = control efficiency of the control equipment (0.90 for panel filters).

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

g) Miscellaneous Requirements

(1) None.

6. K006, PIPE PAINT OPERATION - SMALL LINE

Operations, Property and/or Equipment Description:

Pipe painting operation; this unit was installed in 1983 without an installation permit so this permit imposes BAT limits as well as the federally-enforceable emissions limitations on PM10 requested by the permittee to ensure compliance with facility-wide emission rates protective of the National Ambient Air Quality Standards (NAAQS).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (Synthetic minor to ensure compliance with the NAAQS)	PM_{10} emissions from the stack shall not exceed 1.21 tons based on a rolling 12-month summation.
b.	OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) from the stack shall not exceed 0.79 pound per hour. No visible particulate emissions shall be emitted from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C) and 3745-21-09(U)(1)(d).
c.	OAC rule 3745-21-09(U)(1)(d)	Volatile compound emissions per gallon of coating shall not exceed 3.5 pounds, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit.
d.	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

(2) The maximum coating usage for this emissions unit shall not exceed 243,066 gallons, based upon a rolling, 12-month summation of the coating usage figures. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the coating usage, upon issuance of this permit.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

(2) The permittee shall collect and record the following information each month for the coating line:

a. The name and identification number of each coating employed;

b. the solids content, in pounds per gallon, of each coating employed;

c. the VOC content of each coating (excluding water and exempt solvents), as applied;

d. the total volume, in gallons, of each coating employed;

e. the rolling, 12-month summation of the coating usage; and

f. the total solids usage [the sum of (b. times d.) for all coatings], in tons.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the coatings usage rate upon issuance of this permit.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(2) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

(3) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for PM_{10} specified in b)(1). The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(4) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on coating usage. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
PM_{10} emissions from the stack shall not exceed 1.21 tons per year based on a rolling, 12-month summation.

Applicable Compliance Method:
Compliance with the rolling, 12-month emissions limit shall be determined in accordance with the following method:

E = (M) * (1-TE) * (1-CE)

where:

E = PM_{10} emission rate (tons per month);
M = total coating solids usage rate (tons per month);
TE = transfer efficiency of coating equipment (ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, 0.50 per application); and
CE = control efficiency of the control equipment (0.90 for panel filters).

Compliance with the rolling, 12-month emission limit shall be determined by adding the current month to the previous 11 calendar months totals.

b. Emission Limitation:
PE from the stack shall not exceed 0.79 pound per hour.

Applicable Compliance Method:
Compliance with the hourly PE rate of 0.79 pound per hour shall be determined in accordance with the following method:

E = (M) * (1-TE) * (1-CE)

Where:

E = PE/PM_{10} emission rate (in pounds per hour);
M = total coating solids usage rate (in pounds per hour);
TE = transfer efficiency of coating equipment (ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, 0.50 per application); and
CE = control efficiency of the control equipment (0.90 for panel filters).

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

Compliance with the tons per year emissions limitation for PE shall be determined in accordance with the following method:

E = (M) * (1-TE) * (1-CE)

Where:

E = PE rate (tons per month);
M = total coating solids usage rate (tons per month);
TE = transfer efficiency of coating equipment (ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, 0.50 per application); and
CE = control efficiency of the control equipment (0.90 for panel filters).

c. Emission Limitation:
No visible particulate emissions shall be emitted from the stack serving this emissions unit.

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

d. Emission Limitation:
Volatile compound emissions per gallon of coating shall not exceed 3.5 pounds, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit.

Applicable Compliance Method:
Compliance shall be demonstrated based upon the record keeping requirements specified in d)(2). Formulation data or USEPA Method 24 shall be used to determine the volatile compound contents of the coatings.

g) Miscellaneous Requirements

(1) None.

7. P020, ANNEALING OVEN

Operations, Property and/or Equipment Description:

Annealing oven fired with natural gas; this unit was installed in 1977 without an installation permit so this permit imposes BAT limits as well as the federally-enforceable operating restrictions on natural gas usage requested by the permittee to avoid PSD requirements for CO.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD requirements)	Carbon monoxide (CO) emissions shall not exceed 23.93 tons based on a rolling, 12-month summation.
b.	OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 0.72 pound per hour; 2.17 tons per year. Sulfur dioxide (SO_2) emissions shall not exceed 0.057 pound per hour; 0.17 ton per year. CO emissions shall not exceed 7.98 pounds per hour. Volatile organic compounds (VOC) emissions shall not exceed 0.52 pound per hour; 1.57 tons per year. Nitrogen oxides (NO_x) emissions shall not exceed 9.50 pounds per hour; 28.49 tons per year. Visible PE from the stack shall not exceed 5% opacity as a 6-minute average. The requirements of this rule also include compliance with the requirements of OAC

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		rules 3745-31-05(D).
c.	OAC rule 3745-17-11	See b)(2)a. below.
d.	OAC rule 3745-17-07	See b)(2)b. below.
e.	OAC rule 3745-18-06(E)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The uncontrolled mass rate of emissions (UMRE) for particulate matter from this emissions unit is less than 10 pounds per hour because the metal pipe charged does not emit particulates. The only source of particulate emissions from this natural gas-fired annealing furnace is from the combustion of natural gas. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii) and OAC rule 3745-17-11(A)(4), Figure II and Table I, respectively, do not apply to this emissions unit.

b. Since the mass rate of emissions for particulates in OAC rule 3745-17-11 is not applicable, the opacity limits in OAC rule 3745-17-07 are also not applicable.

c) Operational Restrictions

(1) The maximum natural gas usage shall not exceed 569,760,000 cubic feet (cf) based on a rolling 12-month summation. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the natural gas usage upon issuance of this permit.

(2) The permittee shall burn only natural gas in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. the total natural gas usage, in cf; and

b. the updated 12-month summation of natural gas usage, in cf, calculated by adding the usage information for the current month and the preceding 11 calender months.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the natural gas usage rate upon issuance of this permit.

(2) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month natural gas usage or CO emissions limitations. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(2) The permittee shall submit quarterly deviation (excursion) reports which identify each day when a fuel other than natural gas was burned in this emissions unit. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
PE shall not exceed 0.72 pound per hour; 2.17 tons per year.

Applicable Compliance Method:
Compliance with the hourly PE rate of 0.72 pound per hour shall be determined by the one-time calculation of the maximum hourly heat input rate of this unit, 94.96 million Btu/hr, as provided in the permittee's application, multiplied by the PE factor of 7.6 lbs of PE per million scf of natural gas in AP-42 Section 1.4 Table 1.4-2 (7/1998), multiplied by 1 scf of natural gas/1000 Btu.

Compliance with the tons per year emission limitation for PE shall be demonstrated by multiplying the PE factor of 7.6 lbs of PE per million scf of natural gas in AP-42 Section 1.4 Table 1.4-2 (7/1998), by the actual annual fuel usage in scf, by 1 million scf/1,000,000 cf, then dividing by 2000 lbs/ton.

If required, PE shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

b. Emission Limitation:
SO_2 emissions shall not exceed 0.057 pound per hour; 0.17 ton per year.

Applicable Compliance Method:
Compliance with the hourly SO_2 emission rate of 0.057 pound per hour shall be determined by the one-time calculation of the maximum hourly heat input rate of this unit, 94.96 MMBtu/hr, as provided in the permittee's application, multiplied by the SO_2 emission factor of 0.6 lb of SO_2 per mmscf of natural gas in AP-42 Section 1.4 Table 1.4-2 (7/1998), multiplied by 1 scf of natural gas/1000 Btu.

Compliance with the tons per year emission limitation for SO_2 shall be demonstrated by multiplying the SO_2 emission factor of 0.6 lb of SO_2 per mmscf of natural gas in AP-42 Section 1.4 Table 1.4-2 (7/1998), by the actual annual fuel usage in scf, by 1 mmscf/1,000,000 cf, then dividing by 2000 lbs/ton.

If required, SO_2 emissions shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

c. Emission Limitation:
CO emissions shall not exceed 7.98 pounds per hour.
CO emissions shall not exceed 23.93 tons based on a rolling, 12-month summation.

Applicable Compliance Method:
Compliance with the hourly CO emission rate of 7.98 pounds per hour shall be determined by the one-time calculation of the maximum hourly heat input rate of this unit, 94.96 MMBtu/hr, as provided in the permittee's application, multiplied by the CO emission factor of 84 lbs of CO per mmscf of natural gas in AP-42 Section 1.4 Table 1.4-1 (7/1998), multiplied by 1 scf of natural gas/1000 Btu.

Compliance with the rolling, 12-month emission limitation for CO shall be demonstrated by multiplying the CO emission factor of 84 lbs of CO per mmscf of natural gas in AP-42 Section 1.4 Table 1.4-1 (7/1998), by the actual fuel usage per rolling, 12-month period in scf, by 1 mmscf/1,000,000 cf, then dividing by 2000 lbs/ton.

If required, CO emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

d. Emission Limitation:
VOC emissions shall not exceed 0.52 pound per hour; 1.57 tons per year.

Applicable Compliance Method:
Compliance with the hourly VOC emission rate of 0.52 pound per hour shall be determined by the one-time calculation of the maximum hourly heat input rate of this unit, 94.96 MMBtu/hr, as provided in the permittee's application, multiplied by the VOC emission factor of 5.5 lbs of VOC per mmscf of natural gas in AP-42 Section 1.4 Table 1.4-2 (7/1998), multiplied by 1 scf of natural gas/1000 Btu.

Compliance with the tons per year emission limitation for VOC shall be demonstrated by multiplying the VOC emission factor of 5.5 lbs of VOC per mmscf of natural gas in AP-42 Section 1.4 Table 1.4-2 (7/1998), by the actual annual fuel usage in scf, by 1 mmscf/1,000,000 cf, then dividing by 2000 lbs/ton.

If required, organic compound emissions shall be determined according to test Methods 1 - 4, and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

e. Emission Limitation:
NO_x emissions shall not exceed 9.50 pounds per hour; 28.49 tons per year.

Applicable Compliance Method:
Compliance with the hourly NO_x emission rate of 9.50 pounds per hour shall be determined by the one-time calculation of the maximum hourly heat input rate of this unit, 94.96 MMBtu/hr, as provided in the permittee's application, multiplied by the NO_x emission factor of 100 lbs of NO_x per mmscf of natural gas in AP-42 Section 1.4 Table 1.4-1 (7/1998), multiplied by 1 scf of natural gas/1000 Btu.

Compliance with the tons per year emission limitation for NO_x shall be demonstrated by multiplying the NO_x emission factor of 100 lbs of NO_x per mmscf of natural gas in AP-42 Section 1.4 Table 1.4-1 (7/1998), by the actual annual fuel usage in scf, by 1 mmscf/1,000,000 cf, then dividing by 2000 lbs/ton.

If required, NO_x emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

f. Emission Limitation:
Visible PE from the stack shall not exceed 5% opacity as a 6-minute average.

Applicable Compliance Method:
If required, visible particulate emissions shall be determined according to USEPA Method 9.

g) Miscellaneous Requirements

(1) None.

8. P901, CUPOLA

Operations, Property and/or Equipment Description:

85 TPH cupola furnace for molten iron production controlled by an afterburner and wet scrubber; this unit was installed in 1949 so an installation permit was not required; however, Chapter 31 major modifications of this emissions unit occurred in 1989 and 1998 that increased the production rate and resulted in emissions increases above PSD significance levels so this permit imposes the PSD and BAT requirements applicable at the time of the modification; the permittee has also requested federally-enforceable operating restrictions on throughput of molten iron and hours of operation to ensure compliance with facility-wide emission rates protective of the National Ambient Air Quality Standards (NAAQS)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Emissions of particulate matter (PM) from the stack shall not exceed 0.078 pound per ton of molten iron produced; 6.63 pounds per hour. Emissions of particulate matter less than 10 microns (PM_{10}) from the stack shall not exceed 5.44 pounds per hour. Sulfur dioxide (SO_2) emissions from the stack shall not exceed 0.015 pound per ton of molten iron produced; 1.27 pounds per hour. Carbon monoxide (CO) emissions from the stack shall not exceed 0.51 pounds per ton of molten iron produced; 43.35 pounds per hour. Volatile organic compounds (VOC) emissions from the stack shall not exceed 22.95 pounds per hour.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Nitrogen oxides (NO_x) emissions from the stack shall not exceed 37.40 pounds per hour. Visible particulate emissions (PE) of fugitive dust shall not exceed 20% opacity, as a 3-minute average. Best available control measures shall be implemented that are sufficient to minimize or eliminate emissions of fugitive dust. See b)(2)a. and b. below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC 3745-31- 05(D), OAC rule 3745-31-10 through 20, and OAC rule 3745-21-08(D).
b.	OAC rule 3745-31-10 through -20	PM_{10} emissions from the stack shall not exceed 0.064 pound per ton of molten iron produced. PM_{10} emissions shall not exceed 10.27 tons based on a rolling, 12-month summation. VOC emissions from the stack shall not exceed 0.27 pound per ton of molten iron produced. VOC emissions shall not exceed 37.13 tons based on a rolling, 12-month summation. NO_x emissions from the stack shall not exceed 0.44 pound per ton of molten iron produced. NO_x emissions shall not exceed 60.50 tons based on a rolling, 12-month summation. See b)(2)c.-e. below.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD	PM emissions shall not exceed 12.63 tons based on a rolling, 12-month

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	requirements and to ensure compliance with the NAAQS)	summation. SO_2 emissions shall not exceed 2.06 tons based on a rolling, 12-month summation. CO emissions shall not exceed 70.12 tons based on a rolling, 12-month summation.
d.	OAC rule 3745-17-07(A)	Visible PE from the stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
e.	OAC rule 3745-21-08(D)	See b)(2)d. below.
f.	OAC rule 3745-17-08	See b)(2)f. below.
g.	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
h.	OAC 3745-18-06(E)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
i.	Director's Final Findings and Orders issued December 30, 2004, Section V.2.	See b)(2)g.-i. below.

(2) Additional Terms and Conditions

a. The permittee shall employ best available control measures on the cupola furnace for the purpose of minimizing or eliminating emissions of fugitive dust. In accordance with the permittee's application, the permittee shall maintain enclosures to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing additional measures to ensure compliance.

b. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

c. As part of the BACT determination for PM_{10}, the cupola emissions must be vented to an operating scrubber system with a control efficiency of at least 99.4%. Compliance with the control efficiency requirement shall be demonstrated by compliance with the short term PM_{10} emission limits in b)(1)a.

d. As part of the BACT determination for VOC, the cupola emissions must be vented to an afterburner. VOC and CO gases generated during the operation of this emission unit shall be burned at 1300 degrees Fahrenheit for 0.3 seconds or greater in a direct-flame afterburner or equivalent device equipped with an

indicating pyrometer which is positioned in the working area at the operator's eye level.

e. As part of the BACT determination for NO_x, the cupola emissions must be vented to an afterburner equipped with low NO_x burners.

f. This facility is not located in an area identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions are exempt from the visible particulate emission limitation and the reasonably available control measures established in OAC rule 3745-17-07 (B) and OAC rule 3745-17-08 (B), respectively.

g. The permittee shall maintain and implement the preventive maintenance and malfunction abatement plan (PMMAP) required by Order #2 of the Director's Final Findings and Orders issued December 30, 2004 that was received by Ohio EPA on March 10, 2005, as well as any modifications of the PMMAP that have been approved by Ohio EPA. The PMMAP for the afterburner and wet scrubber systems is designed to prevent, detect, and correct malfunctions or equipment failures which could result in emissions exceeding any applicable law.

h. The permittee shall maintain operation and maintenance records, as required by the PMMAP, to demonstrate that the PMMAP is fully implemented.

i. Modifications to the PMMAP shall be prepared in accordance with applicable Ohio EPA guidance. The PMMAP shall be periodically updated and revised as necessary with prior approval from SEDO. If SEDO does not approve or deny a modification to the PMMAP within 30 days of receipt of the modified PMMAP, the permittee is authorized to conduct the activities described in the modified PMMAP provided the modified PMMAP complies with applicable Ohio EPA guidance and OAC rule 3745-15-06.

c) Operational Restrictions

(1) The maximum production rate for this emissions unit shall not exceed 275,000 tons of molten iron produced based on a rolling, 12-month summation; and

(2) This emissions unit shall operate for no more than 20 hours per day.

(3) The cupola capture and collection system shall meet accepted engineering standards, such as those published by the American Conference of Governmental Industrial Hygienists, and be designed such that emissions from the cupola are conveyed under negative pressure through the two wet scrubbers.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain equipment to continuously monitor the static pressure drop, in inches of water, across the wet scrubber system (venturi scrubber, ring jet scrubber, packed bed and demister) during operation of this emissions unit, including periods of startup and shutdown, per the PMMAP. The permittee shall record the 3-hour average static pressure drop, in inches of water, across the scrubber. The monitoring equipment shall be installed, calibrated, operated, and

maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s).

For each continuous parameter monitoring system (CPMS) for pressure drop, the permittee shall: (i) locate the pressure sensor in or as close as possible to a position that provides a representative measurement of the pressure drop and that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion; (ii) use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range; (iii) check the pressure tap for pluggage daily; (iv) using a manometer, check gauge calibration quarterly and transducer calibration monthly; (v) conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor; and (vi) at least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

The wet scrubbers for the cupola will be operated so that the 3-hour average total pressure drop across the entire control system (venturi scrubber, ring jet scrubber, packed bed and demister) does not fall below the minimum levels established during the initial or subsequent successful stack test (which shall not be less than 48 inches of water column).

When determining three-hour average static pressure drop the following periods shall not be included: (1) the first 15 minutes of start up at the beginning of the operating day, (2) the last 30 minutes during cupola "melt out" at the end of the operating day, and (3) periods when the cupola is off-blast and for 15 minutes after going on-blast from an off-blast condition.

Off-blast means those periods of cupola operation when the cupola is not actively being used to produce molten metal. Off-blast conditions include cupola startup when air is introduced to the cupola to preheat the sand bed and other cupola startup procedures as defined in the startup, shutdown, and malfunction plan. Off-blast conditions also include idling conditions when the blast air is turned off or down to the point that the cupola does not produce additional molten metal.

On-blast means those periods of cupola operation when combustion (blast) air is introduced to the cupola furnace and the furnace is capable of producing molten metal. On-blast conditions are characterized by both blast air introduction and molten metal production.

(2) The permittee shall install, operate and maintain a continuous temperature monitor and recorder which measures and records the exhaust gas temperature when the emission unit is in operation per the PMMAP. Units shall be in degrees Fahrenheit. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

During operation of the cupola, the temperature during the following periods will not be included in the three-hour average: (1) the first 15 minutes of start up at the beginning of the operating day, (2) the last 30 minutes during cupola "melt out" at the end of the

operating day, and (3) periods when the cupola is off-blast and for 15 minutes after going on-blast from an off-blast condition.

Off-blast means those periods of cupola operation when the cupola is not actively being used to produce molten metal. Off-blast conditions include cupola startup when air is introduced to the cupola to preheat the sand bed and other cupola startup procedures as defined in the startup, shutdown, and malfunction plan. Off-blast conditions also include idling conditions when the blast air is turned off or down to the point that the cupola does not produce additional molten metal.

On-blast means those periods of cupola operation when combustion (blast) air is introduced to the cupola furnace and the furnace is capable of producing molten metal. On-blast conditions are characterized by both blast air introduction and molten metal production.

(3) The permittee shall install, operate and maintain two (2) water flow meters, one to measure the water flow rate to the venturi scrubber and one to measure the flow rate to the ring jet scrubber. The 3-hour average water flow rate to the venturi scrubber and the ring jet scrubber will be recorded when the unit is in operation per the PMMAP and units shall be in gallons per minute. The water flow meters and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

For each water flow meter, Clow will: (i) Locate the flow sensor and other necessary equipment in a position that provides a representative flow and that reduces swirling flow or abnormal velocity distributions due to upstream and downstream disturbances; (ii) use a flow sensor with a minimum measurement sensitivity of 2 percent of the flow rate; (iii) conduct a flow sensor calibration check at least semiannually according to the manufacturer's instructions; and (iv) at least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

The minimum flow rate for each wet scrubber shall be established during the initial or subsequent successful stack test. Average water flow over a three hour period shall be maintained at the minimum flow rate established during the initial or subsequent successful stack test.

(4) The permittee shall install pressure gauges on the two pumps supplying water to the venturi scrubber and the ring jet scrubber. In the event that any of the water flow meters installed on the two wet scrubbers fails, water pressure shall be monitored on the pump that is supplying water to that venturi scrubber and/or ring jet scrubber for a period not to exceed 30 days while the water flow meter is repaired or replaced.

Calibration of the pressure gauge shall be verified within 24 hours of use following a water flow meter failure. The minimum water pressure for each wet scrubber shall be established during the initial or subsequent successful stack test. During this period, the permittee will operate that scrubber such that the three-hour average pump pressure does not fall below level established during the initial or subsequent successful stack tests.

(5) The permittee shall collect and record the following information each day:

a. the hours per day this emissions unit is operated; and

b. all control equipment downtime, per the PMMAP.

(6) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit per the Clow Work Instructions as provided for in the PMMAP and any applicable preventative maintenance procedures. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

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

(7) The permittee shall collect and record the following information each month for this emissions unit:

a. the total weight of metal produced (in tons) in this emissions unit; and

b. the rolling, 12-month summation of metal produced, in tons (i.e., the metal produced rate for the current month added to the metal produced rate for the previous 11 calendar months).

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports which provide the following information for each period during which the static pressure across the wet scrubber system falls outside of the applicable range:

a. the date of the excursion;
b. the time interval over which the excursion occurred;
c. the static pressure during the excursion;
d. the cause(s) for the excursion, if known; and
e. the corrective action which has been or will be taken to prevent similar excursions.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(2) The permittee shall submit quarterly deviation (excursion) reports which provide the following information for each 3-hour averaging period during which the exhaust gas temperatures fall below 1300 degrees Farenheit:

a. the date of the excursion;
b. the time interval over which the excursion occurred;
c. the temperature values during the excursion;
d. the cause(s) for the excursion, if known; and
e. the corrective action which has been or will be taken to prevent similar excursions in the future.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(3) The permittee shall submit quarterly deviation (excursion) reports which provide the following information for each period during which the water flow rate to the venturi scrubber and/or ring jet scrubber fall below the applicable rates:

a. the date of the excursion;
b. the time interval over which the excursion occurred;
c. the temperature values during the excursion;
d. the cause(s) for the excursion, if known; and
e. the corrective action which has been or will be taken to prevent similar excursions in the future.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(4) When required to monitor the water pressure, the permittee shall submit quarterly reports which provide the following information for each period during which the pump water pressure to the venturi scrubber and/or ring jet scrubber fall below the applicable rates :

a. the date of the excursion;
b. the time interval over which the excursion occurred;
c. the pump water pressure during the excursion;
d. the cause(s) for the excursion, if known; and
e. the corrective action which has been or will be taken to prevent similar excursions in the future.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(5) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

(6) The permittee shall submit quarterly deviation (excursion) reports that identify any monthly record showing an exceedance of the rolling, 12-month production limitations specified in c)(1) or any day during which the 20-hour limit on operations in c)(2) is exceeded. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(7) The permittee shall submit quarterly deviation (excursion) reports that identify any monthly record showing an exceedance of the rolling, 12-month emissions limitations specified in b)(1). The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:
PM emissions from the stack shall not exceed 0.078 pound per ton of molten iron produced; 6.63 pounds per hour.

Applicable Compliance Method:
The pounds per ton of molten iron produced emission limitation was established using the emission factor of 13.8 pounds of particulate emissions per ton of gray iron produced (1/95 AP-42 Table 12.10-3) multiplied by a control efficiency of 99.435% (the control efficiency the permittee committed to U.S.EPA to meet), which equals 0.078 pounds per ton of molten iron produced.

The pounds per hour emission limitation was established using the emission factor of 13.8 pounds of particulate emissions per ton of gray iron produced (1/95 AP-42 Table 12.10-3) multiplied by 85 tons of gray iron produced per hour (maximum operating rate) multiplied by the 99.435% control efficiency which equals 6.63 pounds per hour.

Compliance shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". See f)(2).

b. Emission Limitations:
SO_2 emissions from the stack shall not exceed 0.015 pound per ton of molten iron produced; 1.27 pounds per hour.

Applicable Compliance Method:
Compliance shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". See f)(2).

c. Emission Limitations:
CO emissions from the stack shall not exceed 0.51 pounds per ton of molten iron produced; 43.35 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". See f)(2).

d. Emission Limitation:
If required, visible particulate emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" as such appendix existed on July 1, 2002.

e. Emission Limitations:
PM_{10} emissions from the stack shall not exceed 5.44 pounds per hour.
PM_{10} emissions from the stack shall not exceed 0.064 pound per ton of molten iron produced.

Applicable Compliance Method:
The pounds per hour emission limitation was established using the emission factor of 13.8 pounds of particulate emissions per ton of gray iron produced (1/95 AP-42 Table 12.10-3) multiplied by 77.7% (percent of particulate emission that are less than 10 microns per 1/95 AP-42 Table 12.10-9) multiplied by 85 tons of gray iron produced per hour (maximum operating rate) multiplied by the 99.4% BACT control efficiency which equals 5.44 pounds per hour.

The pounds per ton of molten iron produced emission limitation was established using the emission factor of 13.8 pounds of particulate emissions per ton of gray iron produced (1/95 AP-42 Table 12.10-3) multiplied by 77.7% (percent of particulate emission that are less than 10 microns per 1/95 AP-42 Table 12.10-9) by the 99.4% BACT control efficiency which equals 0.064 pounds per ton of molten iron produced.

Compliance shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources", or 40 CFR Part 51, Appendix M, Method 201, or 40 CFR Part 51, Appendix M, 201A as appropriate. See f)(2).

f. Emission Limitations:
VOC emissions from the stack shall not exceed 22.95 pounds per hour.
VOC emissions from the stack shall not exceed 0.27 pound per ton of molten iron produced.

Applicable Compliance Method:
Compliance shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) or an approved test protocol. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentrations, and on a consideration of the potential presence of interfering gases. See f)(2).

g. Emission Limitations:

NO_x emissions from the stack shall not exceed 37.4 pounds per hour.
NO_x emissions from the stack shall not exceed 0.44 pound per ton of molten iron produced.

Applicable Compliance Method:
Compliance shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". See f)(2).

h. Emission Limitation:
PM_{10} emissions shall not exceed 10.27 tons based on a rolling, 12-month summation.

Applicable Compliance Method:
Compliance shall be demonstrated based upon the following equations:

$E = (M \times EF_s \times 1/2000) + (M \times EF_f \times (1 - 0.999) \times 1/2000)$

Where:

E = the emission rate, in tons, based on a rolling, 12-month summation;
M = the molten iron production rate, in tons, during the rolling, 12-month period from d)(7)b.;
EF_s= the most recent emission factor for each pollutant, in pounds of pollutant per ton of molten iron, determined from the most recent emissions test; and
EF_f = 13.8 pounds PM X 0.777 (uncontrolled emission factor for PM from AP-42 Table 12.10-3 (1/95) adjusted to PM_{10} fraction).

i. Emission Limitation:
PM emissions shall not exceed 12.63 tons based on a rolling, 12-month summation.

Applicable Compliance Method:
Compliance shall be demonstrated based upon the following equations:

$E = (M \times EF_s \times 1/2000) + (M \times EF_f \times (1 - 0.999) \times 1/2000)$

Where:

E = the emission rate, in tons, based on a rolling, 12-month summation;
M = the molten iron production rate, in tons, during the rolling, 12-month period from d)(7)b.;
EF_s= the most recent emission factor for each pollutant, in pounds of pollutant per ton of molten iron, determined from the most recent emissions test; and
EF_f = 13.8 pounds PM (uncontrolled emission factor for PM from AP-42 Table 12.10-3 (1/95)).

j. Emissions Limitations:
VOC emissions shall not exceed 37.13 tons based on a rolling, 12-month summation.

NO_x emissions shall not exceed 60.50 tons based on a rolling, 12-month summation.
SO_2 emissions shall not exceed 2.06 tons based on a rolling, 12-month summation.
CO emissions shall not exceed 70.12 tons based on a rolling, 12-month summation.

Applicable Compliance Method:
Compliance shall be demonstrated based upon the following equations:

E = M x EF / 2000 lbs/ton

where:

E = the emission rate, in tons, based on a rolling, 12-month summation;
M = the molten iron production rate, in tons, during the rolling, 12-month period from d)(7)b.; and
EF= the most recent emission factor for each pollutant, in pounds of pollutant per ton of molten iron, determined from the most recent emissions test.

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

Applicable Compliance Method:
If required, compliance shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" as such appendix existed on July 1, 2002.

(2) The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within three months after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission limitations for PM, PM_{10}, NOx, SO_2, CO and VOC.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

For PM, Methods 1-5 of 40 CFR Part 60, Appendix A

For $PM_{10,}$ Methods 1-4 and 201 or 201A of 40 CFR Part 51, Appendix M

For NOx, Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A

For SO_2, Methods 1-4 and 6 or 6C of 40 CFR Part 60, Appendix A

For CO, Methods 1-4 and 10 of 40 CFR Part 60, Appendix A

For VOC, Methods 1-4 and 25 and/or 18 of 40 CFR Part 60, Appendix A

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

d. The testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Southeast District Office.

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

f. Personnel from the Ohio EPA, Southeast District Office 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

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

g) Miscellaneous Requirements

(1) None.