



State of Ohio Environmental Protection Agency

Street Address:

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

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

Mailing Address:

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

01/31/01

CERTIFIED MAIL

**RE: Preliminary Proposed Title V
Chapter 3745-77 permit**

02-47-17-0008
Sterling Foundry, Inc.
DANIEL WILLIAM CURTISS
201 Erie Street
Wellington, OH 44090

Dear DANIEL WILLIAM CURTISS:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 06/08/00. The comment period has ended. We are now ready to submit this permit to USEPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written or with agreed-upon changes, then you have the opportunity to schedule a meeting with us to discuss your concerns.

Please contact Jim Orlemann, Engineering Section Manager, 614-644-3592, or you can telefax your request to (614) 644-3681, within fourteen (14) days from receipt of this letter if a meeting is desired. If a request for a meeting is not received within fourteen (14) days of receipt of this letter, we will forward this proposed permit (as written, or with agreed-upon changes) to USEPA for approval.

Very truly yours,

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

cc: Northeast District Office
Becky Castle, DAPC PMU



Ohio EPA

State of Ohio Environmental Protection Agency

PRELIMINARY PROPOSED TITLE V PERMIT

Date: 01/31/01

Effective Date: **To be entered upon final issuance**

Expiration Date: **To be entered upon final issuance**

This document constitutes issuance to:

Sterling Foundry, Inc.
201 Erie Street
Wellington, OH 44090

of a Title V permit for Facility ID: 02-47-17-0008

Emissions Unit ID (Company ID)/
Emissions Unit Activity Description:
F001 (Electric Induction Furnace)
Electric Induction Furnace 1.7 TPH

F004 (Ductile Iron)
Ductile Iron

F008 (#1B Core Making No Bake)
#1B Core Making - No Bake

F009 (#2 Mold Making No Bake)
#2 Mold Making - No Bake

F010 (#3 Mold Making No Bake)
#3 Mold Making - No Bake

F011 (Electric Induction Furnace New)
Electric Induction Furnace - New

F012 (Sand Silos)
Sand Silos

F013 (Pouring & Cooling)
Pouring & Cooling

K002 (Paint Booth Area)
Paint Booth Area

P001 (4 in 1 Pangborn)
4 - in - 1 Pangborn

P005 (Casting Shakeout)
Casting Shakeout

P006 (Green Sand Mullers)
Green Sand Mullers

P008 (Low Bay Grinders)
Low Bay Grinders

P009 (Tumblast)
Tumblast

P010 (Core Ovens)
Core Ovens

T001 (Binder Storage)
Binder storage

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330) 425-9171

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
 - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i)

- and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

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

- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than

the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement.

Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. Permit Shield

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed

therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

16. Off Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

18. Insignificant Activity

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

B. State Only Enforceable Section

1. Permit to Install Requirement

Prior to the “installation” or “modification” of any “air contaminant source,” as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

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

4. Inspections and Information Requests

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

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

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

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

None

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

F006 -Oil Sand Core Making

F007 - #1 Core Making No Bake

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a Permit to Install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Electric Induction Furnace (F001)
Activity Description: Electric Induction Furnace 1.7 TPH

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
3.0 TPH electric induction furnace	OAC rule 3745-17-07 (B)	Exempt, per OAC rule 3745-17-07 (B)(11)(e)
	OAC rule 3745-17-08 (B)	Exempt, because the emissions unit is not located within an Appendix A area.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Ductile Iron (F004)
Activity Description: Ductile Iron

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
production of ductile iron (3 tons per hour) by pouring of molten iron into a Sigmat box	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e)
	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall continue to use the Sigmat box when producing ductile iron to ensure ongoing compliance with OAC rule 3745-15-07.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the tonnage of ductile iron produced without the Sigmat box and the days such production occurred.

IV. Reporting Requirements

1. The permittee shall submit written reports that include the following:
 - a. when the Sigmat box was not used to produce ductile iron;
 - b. the amount of ductile iron produced without the Sigmat box; and
 - c. any corrective measures that were taken to ensure the Sigmat box is used when producing ductile iron.

Each report shall be submitted within 30 days following a failure to employ the Sigmat box when producing ductile iron.

V. Testing Requirements

None

Facility Name: **STERLING FOUNDRY, INC.**

Facility ID: **02-47-17-0008**

Emissions Unit: **Ductile Iron (F004)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #1B Core Making No Bake (F008)
Activity Description: #1B Core Making - No Bake

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
No. 1B no bake line: core making and day sand storage	OAC rule 3745-21-07 (G)(2)	Exempt, per OAC rule 3745-21-07 (G)(9)(i)
	OAC rule 3745-17-08 (B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-17-07 (B)	Exempt, per OAC rule 3745-17-07(B)(11)(e)
	OAC rule 3745-31-05 PTI 02-11816	PE: 1.1 pounds per hour, 4.8 tons per year Visible emissions shall not exceed 20 percent opacity as a three-minute average. Organic compounds: 8 pounds per hour, 40 pounds per day, 7.3 tons per year

2. Additional Terms and Conditions

- Although OAC rule 3745-21-07(G)(9)(i) specifies an exemption for the use of a phenolic urethane no-bake resin binder system in foundry core-making and mold-making operations, the exemption is not yet part of the federally approved SIP. This new exemption was promulgated by the Ohio EPA and became effective on June 15, 1999. The Ohio EPA has received confirmation from the USEPA concerning the acceptability of this exemption, and the permittee has agreed to consider the exemption as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the exemption as a revision to the Ohio SIP for ozone.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the name and identification number of each liquid organic material employed;
 - b. the weight, in pounds or tons, of sand and liquid organic material mixed;
 - c. the number of hours of operation;
 - d. the daily organic compound emission rate (pounds), using an emission factor of 1.17 pounds of organic compounds per ton of sand mixed; and
 - e. the average hourly organic compound emission rate (d)/(c).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information for this emissions unit:
 - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

V. Testing Requirements

1. Emission Limitation: Visible emissions not to exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method: Test method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

2. Emission Limitation: 1.1 pounds of PE per hour

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by using the following equation:

$$E = Ts \times 0.65 \text{ lb PE/ton sand}$$

where:

E = pounds particulate matter emitted per hour

Ts = maximum tons sand used per hour (1.7 tons)

0.65 = emission factor in pounds particulate emissions per ton of sand processed (from Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources", Table 2.7-1 for core making and core mixing)

V. Testing Requirements (continued)

3. Emission Limitation: 4.8 tons of PE per year

Applicable Compliance Method: To determine the actual emission rate for particulate emissions, the following equation shall be used:

$$E = T_{sy} \times 0.65 \times 1/2000$$

where:

E = particulate emissions (tons/year)

T_{sy} = amount of sand used annually (tons per year)

0.65 = emission factor in pounds particulate emissions per ton of sand processed (from Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources", Table 2.7-1 for core mixing and core making)

2000 = conversion factor (pounds per ton)

4. Emission Limitation: 40 pounds per day of organic compounds

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by the record keeping requirements from section A.III. and the following equation:

To determine the daily organic compound emission rate from this emissions unit, the following equation shall be used:

$$E = T_s \times 1.17 \text{ pounds OC per ton sand}$$

where:

E = organic compound emission rate (pounds)

T_s = tons of sand mixed

1.17 = organic compound emission factor, based on emissions testing done by the OCMA on phenolic urethane resins.

If the type of resin changes, the permittee shall determine a new emission factor based on supplier's data.

5. Emission Limitation: 8 pounds per hour of organic compounds

Applicable Compliance Method: Compliance shall be demonstrated through the required record keeping in section A.III.

6. Emission Limitation: 7.3 tons per year of organic compounds.

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by summing the daily organic compound emissions from the record keeping in A.III.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #2 Mold Making No Bake (F009)
Activity Description: #2 Mold Making - No Bake

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
No. 2 no bake line: mold making and day sand storage	OAC rule 3745-21-07 (G)(2)	Organic Compounds: 8 pounds per hour, 40 pounds per day
	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e)
	OAC rule 3745-31-05 PTI 02-11816	PE: 1.0 pound per hour, 4.38 tons per year Visible emissions shall not exceed 20 percent opacity as a three-minute average. 7.3 tons per year of organic compounds

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the name and identification number of each liquid organic material employed;
 - b. the weight, in pounds or tons, of sand and liquid organic material mixed;
 - c. the number of hours of operation;
 - d. the daily organic compound emission rate (pounds), using an emission factor of 0.84 pound of organic compounds per ton of sand mixed; and
 - e. the average hourly organic compound emission rate (d)/(c).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information on the emissions unit:
 - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

V. Testing Requirements

1. Compliance shall be demonstrated as follows:

Emission Limitation: 40 pounds per day of organic compounds

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by the record keeping requirements in section A.III. and the following equation:

To determine the daily organic compound emission rate from this emissions unit, the following equation shall be used:

$$E = Ts \times 0.84$$

where:

E = organic compound emission rate (pounds)

Ts = tons of sand mixed

0.84 = organic compound emission factor, based on data provided by Delta Resins & Refractories on the Airkure resin (a furan no-bake resin system)

If the type of resin changes, the permittee shall determine a new emission factor based on supplier's data.

2. Emission Limitation: 8 pounds per hour of organic compounds

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated through the record keeping requirements in A.III.

3. Emission Limitation: Visible emissions not to exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method: Test method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

V. Testing Requirements (continued)

4. Emission Limitation: 1.0 pound of PE per hour

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by using the following equation:

$$E = Ts \times 0.27$$

where:

E = pounds particulate matter emitted per hour

Ts = maximum tons sand used per hour (3.7 tons)

0.27 = emission factor in pounds particulate emissions per ton of sand processed (from Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources", Table 2.7-1 for mold sand prep and mold making) and a sand to iron ratio of 5:1

5. Emission Limitation: 4.38 tons of PE per year

Applicable Compliance Method: To determine the actual emission rate for particulate emissions, the following equation shall be used:

$$E = Tsy \times 0.27 \times 1/2000$$

where:

E = particulate emissions (tons/year)

Tsy = amount of sand used annually (tons per year)

0.27 = emission factor (pounds particulate emissions per ton of sand processed) from Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources", Table 2.7-1 for mold sand prep and mold making and a sand to iron ratio of 5:1

2000 = conversion factor (pounds per ton)

6. Emission Limitation: 7.3 tons per year of organic compounds

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by summing the daily organic compound emissions from the record keeping in from A.III.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #3 Mold Making No Bake (F010)
Activity Description: #3 Mold Making - No Bake

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
No. 3 no bake line: mold making	OAC rule 3745-21-07 (G)(2)	Organic compounds: 8 pounds per hour and 40 pounds per day
	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e)
	OAC rule 3745-31-05 PTI 02-11816	PE: 0.47 pound per hour, 2.10 tons per year Visible emissions shall not exceed 20 percent opacity as a three-minute average. 7.3 tons per year of organic compounds

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the name and identification number of each liquid organic material employed;
 - b. the weight, in pounds or tons, of sand and liquid organic material mixed;
 - c. the number of hours of operation;
 - d. the daily organic compound emission rate (pound), using an emission factor of 0.84 pound of organic compounds per ton of sand mixed; and
 - e. the average hourly organic compound emission rate (d)/(c).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information on this emissions unit:
 - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

V. Testing Requirements

1. Emission Limitation: 40 pounds per day of organic compounds

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by the record keeping requirements in section A.III. and the following equation:

To determine the daily organic compound emission rate from this emissions unit, the following equation shall be used:

$$E = Ts \times 0.84$$

where:

E = organic compound emission rate (pounds)

Ts = tons of sand mixed

0.84 = organic compound emission factor, based on data provided by Delta Resins & Refractories on the Airkure resin (a furan no-bake resin system)

If the type of resin changes, the permittee shall determine a new emission factor based on supplier's data.

2. Emission Limitation: 8 pounds per hour of organic compounds.

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping requirements in A.III.

3. Emission Limitation: Visible emissions not to exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method: Test method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

V. Testing Requirements (continued)

4. Emission Limitation: 0.47 pound of PE per hour

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by using the following equation:

$$E = Ts \times 0.27$$

where:

E = pounds particulate emitted per hour

Ts = maximum tons sand used per hour (1.7 tons)

0.27 = emission factor in pounds particulate emissions per ton of sand processed (from Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources", Table 2.7-1 for mold sand prep and mold making) and a sand to iron ratio of 5:1

5. Emission Limitation: 2.10 tons of PE per year

Applicable Compliance Method: To determine the actual emission rate for particulate emissions, the following equation shall be used:

$$E = \text{molds produced (tons per year)} \times 0.27 \text{ (pound PM per ton)} \times 1/2000 \text{ (ton/pounds)}$$

where:

E = particulate matter emissions (tons/year)

0.27 = emission factor (pound particulate matter per ton of molds produced) from Ohio EPA's document "Reasonably Available Control Measures for Fugitive Dust Sources", Table 2.7-1 for mold sand prep and mold making and a sand to iron ratio of 5:1

6. Emission Limitation: 7.3 tons per year of organic compounds

Applicable Compliance Method: Compliance with the above limitation shall be demonstrated by summing the daily organic compound emissions from the record keeping in A.III.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Electric Induction Furnace New (F011)
Activity Description: Electric Induction Furnace - New

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
10 ton Inductotherm electric induction furnace	OAC rule 3745-17-08(B)	Exempt, because the emissions unit is not located within an Appendix A area.
	OAC rule 3745-17-07(B)	Exempt, per OAC rule 3745-17-07(B)(11)(e)
	OAC rule 3745-31-05 PTI 02-9143	Visible emissions shall not exceed 20 percent opacity as a three-minute average. PE: 14.19 tons per year. Lead: 0.52 ton per year. See section A.II.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. This emissions unit is limited to 4160 hours of operation per year.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep daily records of the following for this emissions unit:
 - a. hours of operation; and
 - b. the amount of iron, in tons, produced by this emissions unit.

III. Monitoring and/or Record Keeping Requirements (continued)

2. 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 building that houses this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal operations;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. By January 31 of each year, the permittee shall submit a report of the previous year's operating hours.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the building which houses the emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation: Visible emissions not to exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method: Test method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

2. Emission Limitation: 14.19 tons of PE per year

Applicable Compliance Method: Compliance shall be demonstrated by the following equation:

$$EY = (1.5 \times YP)/2000$$

where:

EY = emissions of particulate matter (tons per year)

1.5 = emission factor (lbs/ton produced) from Ohio EPA's RACM document, Table 2.7-1, "Electric induction furnace melting, charging, and tapping"

If a more recent emission factor for this emissions unit is available, the more recent emission factor shall be used.

YP = iron produced per year (tons per year)

2000 = conversion factor (pounds per ton)

V. Testing Requirements (continued)

- 3.** Emission Limitation: 0.52 ton of lead per year

Applicable Compliance Method: Compliance shall be demonstrated by using the following equation:

$$E = (0.1 \times YP)/2000$$

where:

E = emission rate (tons per year) of lead

YP = iron produced per year (tons per year)

0.1 = lead emission rate (pounds per ton produced) from AP-42, Section 12.10, "Gray Iron Foundries", Table 12.10-5, version 1/95

If a more recent emission factor for this emissions unit is available, the more recent emission factor shall be used.

2000 = conversion factor (pounds per ton)

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Sand Silos (F012)
Activity Description: Sand Silos

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2-120 ton sand silos: new sand silo and reclaim sand silo	OAC rule 3745-17-07 (B)	Exempt, per OAC rule 3745-17-07 (B)(11)
	OAC rule 3745-17-08 (B)	Exempt, because the emissions unit is not located within an Appendix A area.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Pouring & Cooling (F013)
Activity Description: Pouring & Cooling

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
iron pouring and cooling	OAC rule 3745-17-07 (B)	Exempt, per OAC rule 3745-17-07 (B)(11)
	OAC rule 3745-17-08 (B)	Exempt, because the emissions unit is not located within an Appendix A area.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Paint Booth Area (K002)
Activity Description: Paint Booth Area

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
painting operations with water wash for particulate emission control	OAC rule 3745-21-09(U)(2)(e)(ii)	See A.I.2.a below.
	OAC rule 3745-17-07	Opacity shall not exceed 20% as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11	PE: 1.4 pounds per hour

2. Additional Terms and Conditions

- 2.a The permittee shall employ no more than 3 gallons of coatings in any one day in this emissions unit. The rule citation reflects the change in the exemption in OAC rule 3745-21-09(U) for miscellaneous metal coating lines located in Lorain County. The revised rule containing the exemption was adopted by the Director of Ohio EPA in May 1999. The USEPA has agreed to consider the rule citation as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the rule citation as a revision to the Ohio SIP for VOC.

II. Operational Restrictions

1. The permittee shall operate the water wash whenever this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the coating line:
 - a. the name and identification number of each coating employed;
 - b. the volume, in gallons, of each coating employed; and
 - c. the total volume, in gallons, of all of the coatings employed.
2. The permittee shall maintain daily records that document any time periods when the water wash was not in service when the emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall notify the Northeast District Office of the Ohio EPA in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit. The notification shall include a copy of such record and shall be sent to the Northeast District Office within 45 days after the exceedance occurs.
2. The permittee shall notify the Northeast District Office of the Ohio EPA in writing of any daily record showing that the water wash was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Northeast District Office of the Ohio EPA within 30 days after the event occurs.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:

Usage of no more than 3 gallons of coatings per day.

Applicable Compliance Method:

Daily records shall be maintained of the usage of all coatings employed, as required in Section A.III.1.

2. Emission Limitation: 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method: OAC rule 3745-17-03(B)(1)

3. Emission Limitation: 1.40 pounds of particulate emissions per hour.

Applicable Compliance Method: To determine the actual worst case particulate emissions rate, the following equation shall be used:

$$E = U \times (1-TE) \times (1-CE)$$

where:

E = particulate matter emissions rate (lbs/hr)

U = maximum coating solids usage rate (lbs/hr)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = fractional control efficiency of the control equipment

If required, emission testing shall be performed in accordance with the procedures in 40 CFR Part 60, Appendix A, Method 5.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 4 in 1 Pangborn (P001)
Activity Description: 4 - in - 1 Pangborn

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
4 in 1 Pangborn (shot blasting to remove sand from castings) with a baghouse	OAC rule 3745-17-11(B)(1)	Emissions of particulate matter shall not exceed 13.5 pounds per hour.
	OAC rule 3745-17-07(A)(1)	Visible particulate matter emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 4 to 8 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

IV. Reporting Requirements

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

V. Testing Requirements

- Compliance with the visible emission limitation shall be determined by using USEPA Method 9, if required by the Ohio EPA.
- Compliance with the particulate emission limitation of 13.5 pounds per hour shall be determined in accordance with OAC rule 3745-17-03 (B)(10).

V. Testing Requirements (continued)

3. Emission Testing Requirements

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

- a. The emission testing shall be conducted within 3 months after issuance of the permit and within 12 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate matter.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1-5 of 40 CFR Part 60, Appendix A.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Northeast District Office of the Ohio EPA.

A particulate emissions test also shall be conducted at the inlet of the control devices to determine the uncontrolled mass rate of emissions for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR Part 60, Appendix A shall be employed.

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

Personnel from the Northeast 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.

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 Northeast District Office of the Ohio EPA within 30 days following completion of the test(s).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Casting Shakeout (P005)
Activity Description: Casting Shakeout

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
casting shakeout, with a baghouse	OAC rule 3745-17-11(B)(1) OAC rule 3745-17-07 (A)(1)	Emissions of particulate matter shall not exceed 5.3 pounds per hour. Visible particulate emissions shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 1 to 4 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a once per day basis.

IV. Reporting Requirements

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

V. Testing Requirements

- Compliance with the particulate matter emission limitation of 5.3 pounds per hour shall be determined in accordance with OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than those required by the visible emissions limit in Section A.I.
- Compliance with the visible emission limitation shall be determined by using Method 9 as set forth in 40 CFR Part 60, Appendix A, if required by the Ohio EPA.

Facility Name: **STERLING FOUNDRY, INC.**

Facility ID: **02-47-17-0008**

Emissions Unit: **Casting Shakeout (P005)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Green Sand Mullers (P006)
Activity Description: Green Sand Mullers

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
green sand mullers #1 and #2, with a baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate matter emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Emissions of particulate matter shall not exceed 11.4 pounds per hour.

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 1 to 4 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendation, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

IV. Reporting Requirements

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

V. Testing Requirements

- Compliance with the visible emission limitation shall be determined by using USEPA Method 9, if required by the Ohio EPA.
- Compliance with the particulate matter emission limitation of 11.4 pounds per hour shall be determined in accordance with OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than those required by the visible emissions limit in Section A.I.

Facility Name: **STERLING FOUNDRY, INC.**

Facility ID: **02-47-17-0008**

Emissions Unit: **Green Sand Mullers (P006)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Low Bay Grinders (P008)
Activity Description: Low Bay Grinders

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
abrasive grinding wheel, with a baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11 (B)(1)	Emissions of particulate matter shall not exceed 14.9 pounds per hour.

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 3 to 6 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendation, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a once per day basis.

IV. Reporting Requirements

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

V. Testing Requirements

- Compliance with the particulate matter emission limitation of 14.9 pounds per hour shall be determined in accordance with OAC rule 3745-17-03(B)(10).
- Compliance with the visible emission limitation shall be determined by using Method 9 as set forth in 40 CFR Part 60, Appendix A, if required by the Ohio EPA.

V. Testing Requirements (continued)

3. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted to within 3 months after issuance of the permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit for particulate emissions.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 1-5 of 40 CFR Part 60, Appendix A.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

A particulate emissions test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR Part 60, Appendix A shall be employed.

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

Personnel from the Northeast District Office of the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the test(s) and submitted to the Northeast District Office of the Ohio EPA within 30 days following completion of the test(s).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tumblast (P009)
Activity Description: Tumblast

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
tumblast, with a baghouse	OAC rule 3745-17-11(B)(1) OAC rule 3745-17-07 (A)(1)	Emissions of particulate matter shall not exceed 10.3 pounds per hour. Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 1 to 4 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a once per day basis.

IV. Reporting Requirements

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

V. Testing Requirements

- Compliance with the particulate matter emission limitation of 10.3 pounds per hour shall be determined in accordance with OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than those required by the visible emissions limit in Section A.I.
- Compliance with the visible emission limitation shall be determined by using Method 9 as set forth in 40 CFR Part 60, Appendix A, if required by the Ohio EPA.

Facility Name: **STERLING FOUNDRY, INC.**

Facility ID: **02-47-17-0008**

Emissions Unit: **Tumblast (P009)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Ovens (P010)
Activity Description: Core Ovens

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
two (581,700 Btu/hr) FECO ovens to bake cores	OAC rule 3745-17-11	Emissions of particulate matter shall not exceed 4.9 pounds per hour.
	OAC rule 3745-17-07	Visible particulate emissions shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

Facility Name: **STERLING FOUNDRY, INC.**

Facility ID: **02-47-17-0008**

Emissions Unit: **Core Ovens (P010)**

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (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 Northeast District Office of the Ohio EPA by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation: Visible emissions shall not exceed 20% opacity as a six-minute average.

Applicable Compliance Method: Compliance shall be demonstrated by using Method 9 of 40 CFR 60, Appendix A.

2. Emission Limitation: Emissions of particulate matter shall not exceed 4.9 pounds per hour.

Applicable Compliance Method: Compliance shall be demonstrated by using Method 5 of 40 CFR 60, Appendix A, if required.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Binder Storage (T001)
Activity Description: Binder storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
6000-gallon binder storage tank	OAC rule 3745-21-07 (D)	Exempt, see A.I.2.a. below

2. Additional Terms and Conditions

- 2.a This emissions unit shall not store any volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep records of each material stored in the tank and indicate in those records whether or not each material is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include an identification of each day during which a volatile photochemically reactive material was stored in the tank.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

THIS IS THE LAST PAGE OF THE PERMIT
