OhioEPA

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

05/14/04

RE: Proposed Title V Chapter 3745-77 Permit
14-31-07-0580
Willard Industries, Inc.

Attn: Genevieve Damico AR-18J
United States Environmental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Dear Ms. Damico:

The proposed issuance of the Title V permit for Willard Industries, Inc., has been created in Ohio EPA's State Air Resources System (STARS) on 05/14/04, for review by USEPA. This proposed action is identified in STARS as 3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's receipt of this certified letter if USEPA does not object to the proposed permit. Please contact me at (614) 644-3631 by the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,

Michael W. Ahern

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

cc: Hamilton County Dept. of Environmental Services
File, DAPC PMU

State of Ohio Environmental Protection Agency

PROPOSED TITLE V PERMIT

Issue Date: 05/14/04	Effective Date: To be entered upon final issuance	Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 14-31-07-0580 to:
Willard Industries, Inc.
1253 Knowlton Street
Cincinnati, OH 45223

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

F004 (Lost Foam Line Pouring and Casting) Aluminum pouring process	F013 (Pangborn "Wheelabrator" Shotblast) Casting shotblast	F017 (Melting/Holding furnace) 2000 lb/hr Melting furnace
F007 (Lost Foam Line Shake-Out) Mold/Casting shakeout	F015 (Goff Shotblast) Casting shotblast	
F008 (Lost Foam Line Sand System) Sand Handling and Processing System	F016 (Glass Bead blast) Casting glass bead blast	

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 3745-77-08(E) 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:

Hamilton County Dept. of Environmental Services
250 William Howard Taft Rd
Cincinnati, OH 45219-2660
(513) 946-7777

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Record Keeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.III of Part III of this Title V permit, 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.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

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.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c. The permittee shall submit required reports in the following manner:

i. **All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:**

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with General Term and Condition A.1.c.ii below; and each report shall cover the previous calendar quarter.

In accordance with OAC rule 3745-15-06, a malfunction constitutes a violation of an emission limitation (or control requirement) and, therefore, is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

ii. **Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.IV of Part III of this Title V permit or, in some cases, in Part II of this Title V permit, all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. OAC rule 3745-77-07(A)(3)(c) is not fully satisfied until the permittee addresses all other deviations of the federally enforceable requirements specified in the permit.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement overrides the reporting requirements specified in this General Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this General Term and Condition.

See B.6 below if no deviations occurred during the quarter.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

iii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted in the following manner:**

Written reports that identify all other deviations of the federally enforceable requirements contained in this permit, including the monitoring, record keeping, and reporting requirements, which are not reported in accordance with General Term and Condition A.1.c.ii above shall be

submitted to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with General Term and Condition A.1.c.ii above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))

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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

v. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

2. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance 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). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in General Term and Condition A.1.c.i above.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Risk Management Plans

If applicable, the permittee shall 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"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

b. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

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.

(Authority for term: OAC rule 3745-77-07(A)(5))

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.
(Authority for term: OAC rule 3745-77-07(A)(6))

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, in accordance with A.10 below. 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.

(Authority for term: OAC rule 3745-77-07(A)(7))

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.
(Authority for term: OAC rule 3745-77-07(A)(8))

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.
(Authority for term: OAC rule 3745-77-07(A)(9))

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.
(Authority for term: OAC rule 3745-77-07(A)(10))

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 (18) 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.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

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.

(Authority for term: OAC rule 3745-77-07(B))

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 Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA 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.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

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.

(Authority for term: OAC rule 3745-77-07(F))

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).
(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

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.
(Authority for term: OAC rule 3745-77-07(G))

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 of the U.S. EPA. 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.

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.
(Authority for term: OAC rule 3745-77-07(I))

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.
(This term is provided for informational purposes only.)

18. Insignificant Activities

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.
(Authority for term: OAC rule 3745-77-07(A)(1))

19. 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.
(Authority for term: OAC rule 3745-77-07(A)(1))

20. 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.
(Authority for term: OAC rule 3745-77-07(A)(1))

21. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification by the responsible official of the date on which the emissions unit was permanently shut down. Authorization to operate the affected part or activity of the stationary source shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

If an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any monitoring, record keeping, reporting, or testing requirements, applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

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

B. *State Only Enforceable Section*

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or record keeping 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 (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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.)

2. 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.

3. 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.

4. 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).

5. 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.

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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 by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a. where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in General Term and Condition A.1.c.ii;

b. where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; and

c. where the company's responsible official has certified that an emissions unit has been permanently shut down.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

1. Willard Industries is exempt from 40 CFR, Part 63, Subpart RRR (Secondary Aluminum MACT) because the facility is not a secondary aluminum production facility as defined in 40 CFR 63.1503. The facility only uses clean charge and does not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decorating kilns.

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

F010 - 3 mmBtu/hr Natural Gas-Fired Reverbatory Aluminum Melting Furnace (permit to install 14-5158)
F011 - 1.5 mmBtu/hr Natural Gas-Fired Aluminum Holding Furnace (permit to install 14-5158)
F018 - 1.5 mmBtu/hr Annealing Furnace #1
F019 - 1.5 mmBtu/hr Annealing Furnace #2
F020 - 1.5 mmBtu/hr Aging Furnace
F021 - 2.2 mmBtu/hr Natural-Gas Fired Crucible Furnace
F022 - Roadways and Parking Areas

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. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the federally-approved versions of OAC Chpaters 3745-17, 3745-18, and/or 3745-21.

3. The permittee shall maintain, service, repair, or dispose of equipment containing any class I or class II substance used as refrigerant in such equipment pursuant to the applicable provisions of 40 CFR Part 82.

B. State Only Enforceable Section

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Lost Foam Line Pouring and Casting (F004)

Activity Description: Aluminum pouring process

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
LFP aluminum pouring, equipped with a baghouse	OAC rule 3745-31-05(A)(3) (PTI 14-05050)	See term A.I.2.a for organic compound (OC) emission limitations. See term A.I.2.b for the particulate emissions (PE)/PM-10 emission limitations. All fugitive dust captured by the ventilation system shall be vented to the baghouse which shall achieve an outlet loading of not greater than 0.030 grain of PE per dry standard cubic foot of exhaust gases and no visible PE from the baghouse exhaust stack. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and (B) and 3745-17-08(B)(3).
	OAC rule 3745-17-07(A)(1)	See term A.I.2.c.
	OAC rule 3745-17-07(B)(1)	See term A.I.2.d.
	OAC rule 3745-17-08(B)(3)	The collection efficiency of the ventilation system shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the points of capture to the extent possible with good engineering design.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The hourly OC emissions from this emissions unit shall not exceed 16.11 lbs/hr*. The total combined hourly OC emissions from emissions units F004, F007, and F008 shall not exceed 16.11 lbs/hr.

The total combined OC emissions from emissions units F004, F007, and F008 shall not exceed 17.1 tons/yr, based upon a rolling, 12-month summation.

* The potential to emit for the lost foam pouring (LFP) line (emissions units F004, F007, and F008) is 16.11 lbs/hr. Therefore, the potential to emit for any one of the individual emissions units is assumed to be equivalent to the potential to emit for the entire line. In addition, no hourly record keeping is required to demonstrate compliance with this emission limitation.

2.b The total PE/PM10 emissions (fugitive+stack) from this emissions unit shall not exceed 4.44 tons/yr, based upon a rolling, 12-month summation.

2.c The visible PE from the stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as specified by rule.

2.d The visible emissions of fugitive dust from this emissions unit shall not exceed 20% opacity, as a three-minute average.

II. Operational Restrictions

1. The emissions from this emissions unit shall be captured and vented to a baghouse in such a manner as to comply with the PE limitations and the visible emission limitations specified in this permit.

2. The maximum annual aluminum pouring rate for this emissions unit shall not exceed 4.5 million pounds per year, based upon a rolling, 12-month summation of the monthly aluminum pouring rates.

3. The pressure drop across the baghouse shall be maintained within the range of 0.50 to 10 inches of water while the emissions unit is in operation.

4. The maximum hours of operation for this emissions unit shall not exceed 4350 hours per year based on a rolling, 12-month summation. The purpose for the hours of operation per year limitation is to ensure compliance with the tons per year limitation for particulate emissions listed in A.I.2.b.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall calculate and maintain the following information each month for emissions units F004, F007 and F008, combined:

a. the amount of aluminum poured, recorded in pounds;

b. the rolling, 12-month summation for the amount of aluminum poured, recorded in pounds (the rolling, 12-month summation shall be calculated by adding the value recorded in line a. for the current month's production to the value recorded in line a. for the previous 11-month's operation);

c. the total monthly OC emissions, in pounds, calculated by multiplying the total amount of aluminum poured (a), by the company emissions factor of 15.2 lb of OC/ton of aluminum poured;*

d. the rolling, 12-month OC emissions, in tons (the rolling, 12-month summation shall be calculated by adding the value recorded in line c. for the current month's production to the value recorded in line c. for the previous 11-month's operation).

(*The lbs of OC/ton of aluminum poured emission factor was based on source-specific testing results performed at Willard Industries on April 25, 2000 and September 13, 2000. See Permit to Install 14-05050 for the derivation of this emission factor.)

2. 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). An audible alarm shall be maintained to notify the permittee of deviations of the baghouse pressure drop range specified in term A.II.3 while this emissions unit is in operation. An interlock system shall be operated that discontinues the lost foam pouring operation during periods of time when the baghouse is operating outside the pressure drop range specified in term A.II.3.

3. The permittee shall perform an inspection of the collection and control system on a weekly basis. The purpose of this inspection is to ensure its proper functioning. At a minimum this inspection shall include a visible check of the hood and duct systems leading to the baghouse, a check for the presence of excessive fugitive visible emissions, and a check for the presence of visible emissions from the stack associated with this emissions unit.The results of this inspection shall be recorded in a log book. Any problems noted during the inspection and the corrective actions necessary to remedy the problems should also be noted in the log book.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust at the points of egress serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

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

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

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

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

6. The permittee shall collect and record the following information on a monthly basis for emissions unit F004:

a. the total hours of operation during the month; and

b. the rolling, 12-month summation for the hours of operation for this emission unit. The rolling, 12-month summation shall be calculated by adding the value recorded in line a. for the current month's production to the value recorded in line a. for the previous 11-month's operation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:

a. each exceedance of the rolling, 12-month aluminum pouring limitation of 4.5 million pounds;

b. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in term A.II.3;

c. each exceedance of the rolling, 12-month OC emission limitation of 17.1 tons (for emission units F004, F007 and F008, combined);

d. each week during which the inspection of the collection and control system did not take place and the reason for not performing the inspection; and

e. each exceedance of the hours of operation restriction of 4350 hours per year based on a rolling, 12-month summation.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

2. The permittee shall submit annual reports that specify the total, combined, OC emissions from emission units F004, F007 and F008.

These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

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

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

V. Testing Requirements

1. Compliance with the emission limitations and the operational restrictions specified in Sections A.I.1 and A.II of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:
16.11 lbs of OC/hour from this emissions unit and 16.11 lbs of OC/hour for emissions units F004, F007, and F008 combined.

Applicable Compliance Method:
Compliance with the hourly allowable OC emission limitations is demonstrated based upon the emissions unit's potential to emit as described in A.I.2.a of this permit (see PTI 14-05050 for the detailed calculation of the potential to emit).

Additionally, compliance with the lbs of OC/hr emission limitation was demonstrated during stack testing conducted on April 25, 2000 and September 13, 2000.

If required, compliance with the hourly OC emission limitation shall be demonstrated by stack testing conducted in accordance with Method 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

1.b Emission Limitations:
17.1 TPY of OC from F004, F007, and F008 combined

Applicable Compliance Method:
Compliance with the annual allowable OC emission limitation shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

1.c Emission Limitations:
0.030 grain of PE per dry standard cubic foot (gr/dscf) of exhaust gases from the baghouse controlling this emissions unit and 4.44 TPY PE/PM10

Applicable Compliance Method:
Compliance with the annual PE limitation may be determined by multiplying the grain loading limitation* of 0.030 gr PE/dscf by the maximum exhaust gas flow rate from the baghouse (dscf/minute) by 60 min/hr, and by 4350 hrs/yr, and then dividing by 7000 gr/lb and 2000 lbs/ton.

Additionally, compliance with the gr/dscf emission limitation was demonstrated during a stack test conducted on 1/16/02 when an emission rate of 0.0022 gr/dscf was determined.

Also, during the 1/16/02 stack test an emission rate of 0.63 lb PE/hr was determined. This hourly emission rate multiplied by the hours of operation recorded in A.III.5. divided by 2000 lbs/ton may be used to demonstrate compliance with the TPY emission limitation.

If required, compliance with the grain loading emission limitation shall be demonstrated by stack testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

1.d Emission Limitation:
Visible PE shall not exceed 20% opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.e Emission Limitation:
Visible emissions of fugitive dust shall not exceed twenty percent opacity, as a three-minute average.

Applicable Compliance Method:
If required, compliance shall be determined by visible emission evaluations performed in accordance with 40 CFR, Part 60, Method 9 and the procedures in OAC rule 3745-17-03(B)(3).

The Method 9 readings to determine compliance with this visible emission limitation shall be taken at the points of egress to the atmosphere.

1.f Material Usage Limitation:
Maximum annual aluminum pouring rate for this emissions unit shall not exceed 4.5 million pounds per year, based upon a rolling, 12-month summation of the aluminum pouring rate.

Applicable Compliance Method:
Compliance with the usage limitation above shall be based on the record keeping requirements established in section A.III of the terms and conditions of this permit.

1.g Hours of operation restriction:
Maximum hours of operation for this emissions unit shall not exceed 4350 hours per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:
Compliance with the hours of operation restriction above shall be based on the record keeping requirements established in section A.III of the terms and conditions of this permit.

VI. Miscellaneous Requirements

1. Emissions units F004, F007, F008, F013, F015, and F016 are vented to a common baghouse.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
LFP aluminum pouring equipped with a baghouse		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit F004 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the ISCST3 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the ISCST3 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Benzene
TLV(ug/m3): 1594
Maximum Hourly Emission Rate (lbs/hr): 0.1
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.3
MAGLC (ug/m3): 38

Pollutant: Ethylbenzene
TLV (ug/m3): 433,306
Maximum Hourly Emission Rate (lbs/hr): 2.17
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 49
MAGLC (ug/m3): 10,317

Pollutant: Methylstyrene
TLV (ug/m3): 241,184
Maximum Hourly Emission Rate (lbs/hr): 0.77
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 17
MAGLC (ug/m3): 5742

Pollutant: Styrene
TLV (ug/m3): 85,200
Maximum Hourly Emission Rate (lbs/hr): 11.4
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 258
MAGLC (ug/m3): 2029

Pollutant: Toluene
TLV (ug/m3): 188,020
Maximum Hourly Emission Rate (lbs/hr): 0.73
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 17
MAGLC (ug/m3): 4477

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

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled: and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied with the above changes, the Ohio EPA will not consider the change(s)to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is(are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Lost Foam Line Shake-Out (F007)

Activity Description: Mold/Casting shakeout

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
LFP sand shakeout, equipped with a baghouse	OAC rule 3745-31-05(A)(3) (PTI 14-05050)	See term A.I.2.a for organic compound (OC) emission limitations. See term A.I.2.b for the particulate emissions (PE)/PM-10 emission limitations. All fugitive dust captured by the ventilation system shall be vented to the baghouse which shall achieve an outlet loading of not greater than 0.030 grain of PE per dry standard cubic foot of exhaust gases and no visible PE from the baghouse exhaust stack. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and (B) and 3745-17-08(B)(3).
	OAC rule 3745-17-07(A)(1)	See term A.I.2.c.
	OAC rule 3745-17-07(B)(1)	See term A.I.2.d.
	OAC rule 3745-17-08(B)(3)	The collection efficiency of the ventilation system shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the points of capture to the extent possible with good engineering design.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The hourly OC emissions from this emissions unit shall not exceed 16.11 lbs/hr*. The total combined hourly OC emissions from emissions units F004, F007, and F008 shall not exceed 16.11 lbs/hr.

The total combined OC emissions from emissions units F004, F007, and F008 shall not exceed 17.1 tons/yr, based upon a rolling, 12-month summation.

* The potential to emit for the lost foam pouring (LFP) line (emissions units F004, F007, and F008) is 16.11 lbs/hr. Therefore, the potential to emit for any one of the individual emissions units is assumed to be equivalent to the potential to emit for the entire line. In addition, no hourly record keeping is required to demonstrate compliance with this emission limitation.

2.b The total PE/PM10 emissions (fugitive+stack) from this emissions unit shall not exceed 2.21 tons/yr, based upon a rolling, 12-month summation.

2.c The visible PE from the stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as specified by rule.

2.d The visible emissions of fugitive dust from this emissions unit shall not exceed 20% opacity, as a three-minute average.

II. Operational Restrictions

1. The emissions from this emissions unit shall be captured and vented to a baghouse in such a manner as to comply with the PE limitations and the visible emission limitations specified in this permit.

2. The maximum annual aluminum pouring rate for this emissions unit shall not exceed 4.5 million pounds per year, based upon a rolling, 12-month summation of the monthly aluminum pouring rates.

3. The pressure drop across the baghouse shall be maintained within the range of 0.50 to 10 inches of water while the emissions unit is in operation.

4. The maximum hours of operation for this emissions unit shall not exceed 4350 hours per year based on a rolling, 12-month summation. The purpose for the hours of operation per year limitation is to ensure compliance with the tons per year limitation for particulate emissions listed in A.I.2.b.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall calculate and maintain the following information each month for emissions units F004, F007 and F008, combined:

a. the amount of aluminum poured, recorded in pounds;

b. the rolling, 12-month summation for the amount of aluminum poured, recorded in pounds (the rolling, 12-month summation shall be calculated by adding the value recorded in line a. for the current month's production to the value recorded in line a. for the previous 11-month's operation);

c. the total monthly OC emissions, in pounds, calculated by multiplying the total amount of aluminum poured (a), by the company emissions factor of 15.2 lb of OC/ton of aluminum poured;*

d. the rolling, 12-month OC emissions, in tons (the rolling, 12-month summation shall be calculated by adding the value recorded in line c. for the current month's production to the value recorded in line c. for the previous 11-month's operation).

(*The lbs of OC/ton of aluminum poured emission factor was based on source-specific testing results performed at Willard Industries on April 25, 2000 and September 13, 2000. See Permit to Install 14-05050 for the derivation of this emission factor.)

2. 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). An audible alarm shall be maintained to notify the permittee of deviations of the baghouse pressure drop range specified in term A.II.3 while this emissions unit is in operation. An interlock system shall be operated that discontinues the lost foam pouring operation during periods of time when the baghouse is operating outside the pressure drop range specified in term A.II.3.

3. The permittee shall perform an inspection of the collection and control system on a weekly basis. The purpose of this inspection is to ensure its proper functioning. At a minimum this inspection shall include a visible check of the hood and duct systems leading to the baghouse, a check for the presence of excessive fugitive visible emissions, and a check for the presence of visible emissions from the stack associated with this emissions unit.The results of this inspection shall be recorded in a log book. Any problems noted during the inspection and the corrective actions necessary to remedy the problems should also be noted in the log book.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust at the point of egress serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

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

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

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

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

6. The permittee shall collect and record the following information on a monthly basis for emissions unit F004:

a. the total hours of operation during the month; and

b. the rolling, 12-month summation for the hours of operation for this emission unit. The rolling, 12-month summation shall be calculated by adding the value recorded in line a. for the current month's production to the value recorded in line a. for the previous 11-month's operation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:

a. each exceedance of the rolling, 12-month aluminum pouring limitation of 4.5 million pounds;

b. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in term A.II.3;

c. each exceedance of the rolling, 12-month OC emission limitation of 17.1 tons (for emission units F004, F007 and F008, combined);

d. each week during which the inspection of the collection and control system did not take place and the reason for not performing the inspection; and

e. each exceedance of the hours of operation restriction of 4350 hours per year based on a rolling, 12-month summation.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

2. The permittee shall submit annual reports that specify the total, combined, OC emissions from emission units F004, F007 and F008.

These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

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

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

V. Testing Requirements

1. Compliance with the emission limitations and the operational restrictions specified in Sections A.I.1 and A.II of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:
16.11 lbs of OC/hour from this emissions unit and 16.11 lbs of OC/hour for emissions units F004, F007, and F008 combined.

Applicable Compliance Method:
Compliance with the hourly allowable OC emission limitations is demonstrated based upon the emissions unit's potential to emit as described in A.I.2.a of this permit (see PTI 14-05050 for the detailed calculation of the potential to emit).

Additionally, compliance with the lbs of OC/hr emission limitation was demonstrated during stack testing conducted on April 25, 2000 and September 13, 2000.

If required, compliance with the hourly OC emission limitation shall be demonstrated by stack testing conducted in accordance with Method 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

1.b Emission Limitations:
17.1 TPY of OC from F004, F007, and F008 combined

Applicable Compliance Method:
Compliance with the annual allowable OC emission limitation shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

1.c Emission Limitations:
0.030 grain of PE per dry standard cubic foot (gr/dscf) of exhaust gases from the baghouse controlling this emissions unit and 4.44 TPY PE/PM10

Applicable Compliance Method:
Compliance with the annual PE limitation may be determined by multiplying the grain loading limitation* of 0.030 gr PE/dscf by the maximum exhaust gas flow rate from the baghouse (dscf/minute) by 60 min/hr, and by 4350 hrs/yr, and then dividing by 7000 gr/lb and 2000 lbs/ton.

Additionally, compliance with the gr/dscf emission limitation was demonstrated during a stack test conducted on 1/16/02 when an emission rate of 0.0022 gr/dscf was determined.

Also, during the 1/16/02 stack test an emission rate of 0.63 lb PE/hr was determined. This hourly emission rate multiplied by the hours of operation recorded in A.III.5. divided by 2000 lbs/ton may be used to demonstrate compliance with the TPY emission limitation.

If required, compliance with the grain loading emission limitation shall be demonstrated by stack testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

1.d Emission Limitation:
Visible PE shall not exceed 20% opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.e Emission Limitation:
Visible emissions of fugitive dust shall not exceed twenty percent opacity, as a three-minute average.

Applicable Compliance Method:
If required, compliance shall be determined by visible emission evaluations performed in accordance with 40 CFR, Part 60, Method 9 and the procedures in OAC rule 3745-17-03(B)(3).

The Method 9 readings to determine compliance with this visible emission limitation shall be taken at the points of egress to the atmosphere.

1.f Material Usage Limitation:
Maximum annual aluminum pouring rate for this emissions unit shall not exceed 4.5 million pounds per year, based upon a rolling, 12-month summation of the aluminum pouring rate.

Applicable Compliance Method:
Compliance with the usage limitation above shall be based on the record keeping requirements established in section A.III of the terms and conditions of this permit.

1.g Hours of operation restriction:
Maximum hours of operation for this emissions unit shall not exceed 4350 hours per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:
Compliance with the hours of operation restriction above shall be based on the record keeping requirements established in section A.III of the terms and conditions of this permit.

VI. Miscellaneous Requirements

1. Emissions units F004, F007, F008, F013, F015, and F016 are vented to a common baghouse.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
LFP sand shakeout, equipped with a baghouse		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit F004 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the ISCST3 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the ISCST3 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Benzene
TLV(ug/m3): 1594
Maximum Hourly Emission Rate (lbs/hr): 0.1
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.3
MAGLC (ug/m3): 38

Pollutant: Ethylbenzene
TLV (ug/m3): 433,306
Maximum Hourly Emission Rate (lbs/hr): 2.17
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 49
MAGLC (ug/m3): 10,317

Pollutant: Methylstyrene
TLV (ug/m3): 241,184
Maximum Hourly Emission Rate (lbs/hr): 0.77
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 17
MAGLC (ug/m3): 5742

Pollutant: Styrene
TLV (ug/m3): 85,200
Maximum Hourly Emission Rate (lbs/hr): 11.4
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 258
MAGLC (ug/m3): 2029

Pollutant: Toluene
TLV (ug/m3): 188,020
Maximum Hourly Emission Rate (lbs/hr): 0.73
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 17
MAGLC (ug/m3): 4477

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

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled: and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied with the above changes, the Ohio EPA will not consider the change(s)to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is(are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Lost Foam Line Sand System (F008)

Activity Description: Sand Handling and Processing System

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
LFP sand handling, equipped with a baghouse	OAC rule 3745-31-05(A)(3) (PTI 14-05050)	See term A.I.2.a for organic compound (OC) emission limitations. See term A.I.2.b for the particulate emissions (PE)/PM-10 emission limitations. All fugitive dust captured by the ventilation system shall be vented to the baghouse which shall achieve an outlet loading of not greater than 0.030 grain of PE per dry standard cubic foot of exhaust gases and no visible PE from the baghouse exhaust stack. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and (B) and 3745-17-08(B)(3).
	OAC rule 3745-17-07(A)(1)	See term A.I.2.c.
	OAC rule 3745-17-07(B)(1)	See term A.I.2.d.
	OAC rule 3745-17-08(B)(3)	The collection efficiency of the ventilation system shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the points of capture to the extent possible with good engineering design.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The hourly OC emissions from this emissions unit shall not exceed 16.11 lbs/hr*. The total combined hourly OC emissions from emissions units F004, F007, and F008 shall not exceed 16.11 lbs/hr.

The total combined OC emissions from emissions units F004, F007, and F008 shall not exceed 17.1 tons/yr, based upon a rolling, 12-month summation.

* The potential to emit for the lost foam pouring (LFP) line (emissions units F004, F007, and F008) is 16.11 lbs/hr. Therefore, the potential to emit for any one of the individual emissions units is assumed to be equivalent to the potential to emit for the entire line. In addition, no hourly record keeping is required to demonstrate compliance with this emission limitation.

2.b The total PE/PM10 emissions (fugitive+stack) from this emissions unit shall not exceed 8.24 tons/yr, based upon a rolling, 12-month summation.

2.c The visible PE from the stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as specified by rule.

2.d The visible emissions of fugitive dust from this emissions unit shall not exceed 20% opacity, as a three-minute average.

II. Operational Restrictions

1. The emissions from this emissions unit shall be captured and vented to a baghouse in such a manner as to comply with the PE limitations and the visible emission limitations specified in this permit.

2. The maximum annual aluminum pouring rate for this emissions unit shall not exceed 4.5 million pounds per year, based upon a rolling, 12-month summation of the monthly aluminum pouring rates.

3. The pressure drop across the baghouse shall be maintained within the range of 0.50 to 10 inches of water while the emissions unit is in operation.

4. The maximum hours of operation for this emissions unit shall not exceed 4350 hours per year based on a rolling, 12-month summation. The purpose for the hours of operation per year limitation is to ensure compliance with the tons per year limitation for particulate emissions listed in A.I.2.b.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall calculate and maintain the following information each month for emissions units F004, F007 and F008, combined:

a. the amount of aluminum poured, recorded in pounds;

b. the rolling, 12-month summation for the amount of aluminum poured, recorded in pounds (the rolling, 12-month summation shall be calculated by adding the value recorded in line a. for the current month's production to the value recorded in line a. for the previous 11-month's operation);

c. the total monthly OC emissions, in pounds, calculated by multiplying the total amount of aluminum poured (a), by the company emissions factor of 15.2 lb of OC/ton of aluminum poured;*

d. the rolling, 12-month OC emissions, in tons (the rolling, 12-month summation shall be calculated by adding the value recorded in line c. for the current month's production to the value recorded in line c. for the previous 11-month's operation).

(*The lbs of OC/ton of aluminum poured emission factor was based on source-specific testing results performed at Willard Industries on April 25, 2000 and September 13, 2000. See Permit to Install 14-05050 for the derivation of this emission factor.)

2. 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). An audible alarm shall be maintained to notify the permittee of deviations of the baghouse pressure drop range specified in term A.II.3 while this emissions unit is in operation. An interlock system shall be operated that discontinues the lost foam pouring operation during periods of time when the baghouse is operating outside the pressure drop range specified in term A.II.3.

3. The permittee shall perform an inspection of the collection and control system on a weekly basis. The purpose of this inspection is to ensure its proper functioning. At a minimum this inspection shall include a visible check of the hood and duct systems leading to the baghouse, a check for the presence of excessive fugitive visible emissions, and a check for the presence of visible emissions from the stack associated with this emissions unit.The results of this inspection shall be recorded in a log book. Any problems noted during the inspection and the corrective actions necessary to remedy the problems should also be noted in the log book.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust at the point of egress serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

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

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

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

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

6. The permittee shall collect and record the following information on a monthly basis for emissions unit F004:

a. the total hours of operation during the month; and

b. the rolling, 12-month summation for the hours of operation for this emission unit. The rolling, 12-month summation shall be calculated by adding the value recorded in line a. for the current month's production to the value recorded in line a. for the previous 11-month's operation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:

a. each exceedance of the rolling, 12-month aluminum pouring limitation of 4.5 million pounds;

b. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in term A.II.3;

c. each exceedance of the rolling, 12-month OC emission limitation of 17.1 tons (for emission units F004, F007 and F008, combined);

d. each week during which the inspection of the collection and control system did not take place and the reason for not performing the inspection; and

e. each exceedance of the hours of operation restriction of 4350 hours per year based on a rolling, 12-month summation.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

2. The permittee shall submit annual reports that specify the total, combined, OC emissions from emission units F004, F007 and F008.

These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

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

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

V. Testing Requirements

1. Compliance with the emission limitations and the operational restrictions specified in Sections A.I.1 and A.II of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:
16.11 lbs of OC/hour from this emissions unit and 16.11 lbs of OC/hour for emissions units F004, F007, and F008 combined.

Applicable Compliance Method:
Compliance with the hourly allowable OC emission limitations is demonstrated based upon the emissions unit's potential to emit as described in A.I.2.a of this permit (see PTI 14-05050 for the detailed calculation of the potential to emit).

Additionally, compliance with the lbs of OC/hr emission limitation was demonstrated during stack testing conducted on April 25, 2000 and September 13, 2000.

If required, compliance with the hourly OC emission limitation shall be demonstrated by stack testing conducted in accordance with Method 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

1.b Emission Limitations:
17.1 TPY of OC from F004, F007, and F008 combined

Applicable Compliance Method:
Compliance with the annual allowable OC emission limitation shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

1.c Emission Limitations:
0.030 grain of PE per dry standard cubic foot (gr/dscf) of exhaust gases from the baghouse controlling this emissions unit and 4.44 TPY PE/PM10

Applicable Compliance Method:
Compliance with the annual PE limitation may be determined by multiplying the grain loading limitation* of 0.030 gr PE/dscf by the maximum exhaust gas flow rate from the baghouse (dscf/minute) by 60 min/hr, and by 4350 hrs/yr, and then dividing by 7000 gr/lb and 2000 lbs/ton.

Additionally, compliance with the gr/dscf emission limitation was demonstrated during a stack test conducted on 1/16/02 when an emission rate of 0.0022 gr/dscf was determined.

Also, during the 1/16/02 stack test an emission rate of 0.63 lb PE/hr was determined. This hourly emission rate multiplied by the hours of operation recorded in A.III.5. divided by 2000 lbs/ton may be used to demonstrate compliance with the TPY emission limitation.

If required, compliance with the grain loading emission limitation shall be demonstrated by stack testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

1.d Emission Limitation:
Visible PE shall not exceed 20% opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.e Emission Limitation:
Visible emissions of fugitive dust shall not exceed twenty percent opacity, as a three-minute average.

Applicable Compliance Method:
If required, compliance shall be determined by visible emission evaluations performed in accordance with 40 CFR, Part 60, Method 9 and the procedures in OAC rule 3745-17-03(B)(3).

The Method 9 readings to determine compliance with this visible emission limitation shall be taken at the points of egress to the atmosphere.

1.f Material Usage Limitation:
Maximum annual aluminum pouring rate for this emissions unit shall not exceed 4.5 million pounds per year, based upon a rolling, 12-month summation of the aluminum pouring rate.

Applicable Compliance Method:
Compliance with the usage limitation above shall be based on the record keeping requirements established in section A.III of the terms and conditions of this permit.

1.g Hours of operation restriction:
Maximum hours of operation for this emissions unit shall not exceed 4350 hours per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:
Compliance with the hours of operation restriction above shall be based on the record keeping requirements established in section A.III of the terms and conditions of this permit.

VI. Miscellaneous Requirements

1. Emissions units F004, F007, F008, F013, F015, and F016 are vented to a common baghouse.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
LFP sand handling, equipped with a baghouse		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit F004 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the ISCST3 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the ISCST3 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Benzene
TLV(ug/m3): 1594
Maximum Hourly Emission Rate (lbs/hr): 0.1
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.3
MAGLC (ug/m3): 38

Pollutant: Ethylbenzene
TLV (ug/m3): 433,306
Maximum Hourly Emission Rate (lbs/hr): 2.17
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 49
MAGLC (ug/m3): 10,317

Pollutant: Methylstyrene
TLV (ug/m3): 241,184
Maximum Hourly Emission Rate (lbs/hr): 0.77
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 17
MAGLC (ug/m3): 5742

Pollutant: Styrene
TLV (ug/m3): 85,200
Maximum Hourly Emission Rate (lbs/hr): 11.4
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 258
MAGLC (ug/m3): 2029

Pollutant: Toluene
TLV (ug/m3): 188,020
Maximum Hourly Emission Rate (lbs/hr): 0.73
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 17
MAGLC (ug/m3): 4477

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

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled: and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied with the above changes, the Ohio EPA will not consider the change(s)to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is(are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Pangborn "Wheelabrator" Shotblast (F013)

Activity Description: Casting shotblast

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
casting shotblast #1 (Wheelabrator), equipped with a baghouse	OAC rule 3745-31-05(A)(3) (PTI 14-05158)	0.24 lb of particulate emissions (PE)/PM10/hr* 1.1 tons/yr of PE/PM10* *The PE limitations for this emissions unit are based on the emissions unit's potential to emit (PTE). Therefore, no hourly record keeping is required to demonstrate compliance with these emission limitations. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible PE from the stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE from this emissions unit shall be vented to the baghouse.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 0.50 to 10 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform an inspection of the collection and control system on a weekly basis. The purpose of this inspection is to ensure its proper functioning. The results of this inspection shall be recorded in a log book.

2. 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). An audible alarm shall be maintained to notify the permittee of deviations of the baghouse pressure drop range specified in term A.II.1 while this emissions unit is in operation. An interlock system shall be operated that discontinues operation of this emissions unit during periods of time when the baghouse is operating outside the pressure drop range specified in term A.II.1.

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

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each week when the inspection of the collection and control system does not take place and the reason for not performing the inspection.

2. The permittee shall submit quarterly 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 in term A.II.1.

3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

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

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emission Limitations:
0.24 lb/hr of PE/PM10, 1.1 tons/yr of PE/PM10

Applicable Compliance Method:
Compliance with the hourly PE limitation of 0.24 lb/hr may be demonstrated by multiplying an emission factor of 0.0022 grain/dscf * by the air flow rate of 2700 dscf/min and by 60 min/hr, and then dividing by 7000 grains/lb.

(0.0022 grain/dscf x 2700 dscf/min x 60 min/hr / 7000 grain/lb = .051 lb of PE/hr)

*The emission factor of 0.0022 gr/dscf is based on stack testing conducted at the facility on 1/16/02 for a similar source.

Compliance with the annual PE limitation of 1.1 tons/yr may be demonstrated by multiplying the maximum hourly emission rate of 0.051 lb of PE/hr by 8760 hr/yr and then dividing by 2000 lbs/ton.

(0.051 lb of PE/hr x 8760 hr/yr / 2000 lbs/ton = .22 ton/yr of PE)

If required, compliance with the hourly PE limitation shall be demonstrated by stack testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

1.b Emission Limitation:
Visible PE shall not exceed 20% opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method
If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

1. Emissions units F004, F007, F008, F013, F015, and F016 are vented to a common baghouse.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Goff Shotblast (F015)

Activity Description: Casting shotblast

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
casting shotblast #2 (Goff), equipped with a baghouse	OAC rule 3745-31-05(A)(3) (PTI 14-05158)	0.10 lb of particulate emissions (PE)/PM10/hr* 0.44 ton/yr of PE/PM10* *The PE limitations for this emissions unit are based on the emissions unit's potential to emit (PTE). Therefore, no hourly record keeping is required to demonstrate compliance with these emission limitations. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible PE from the stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE from this emissions unit shall be vented to the baghouse.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 0.50 to 10 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform an inspection of the collection and control system on a weekly basis. The purpose of this inspection is to ensure its proper functioning. The results of this inspection shall be recorded in a log book.

2. 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). An audible alarm shall be maintained to notify the permittee of deviations of the baghouse pressure drop range specified in term A.II.1 while this emissions unit is in operation. An interlock system shall be operated that discontinues operation of this emissions unit during periods of time when the baghouse is operating outside the pressure drop range specified in term A.II.1.

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

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each week when the inspection of the collection and control system does not take place and the reason for not performing the inspection.

2. The permittee shall submit quarterly 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 in term A.II.1.

3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

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

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emissions Limitations:
0.10 lb/hr of PE/PM10, 0.44 ton/yr of PE/PM10

Applicable Compliance Method:
Compliance with the hourly PE limitation of 0.10 lb/hr may be demonstrated by multiplying an emission factor of 0.0022 grain/dscf * by the air flow rate of 800 dscf/min and by 60 min/hr, and then dividing by 7000 grains/lb.

(0.0022 grain/dscf x 800 dscf/min x 60 min/hr / 7000 grain/lb = .015 lb of PE/hr)

*The emission factor of 0.0022 gr/dscf is based on stack testing conducted at the facility on 1/16/02 for a similar source.

Compliance with the annual PE limitation of 0.44 ton/yr may be demonstrated by multiplying the maximum hourly emission rate of 0.015 lb of PE/hr by 8760 hr/yr and then dividing by 2000 lbs/ton.

(0.015 lb of PE/hr x 8760 hr/yr / 2000 lbs/ton = .07 ton/yr of PE)

If required, compliance with the hourly PE limitation shall be demonstrated by stack testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

1.b Emission Limitation:
Visible PE shall not exceed 20% opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method
If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

1. Emissions units F004, F007, F008, F013, F015, and F016 are vented to a common baghouse.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Glass Bead blast (F016)

Activity Description: Casting glass bead blast

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
casting shotblast #2 (glass bead), equipped with a baghouse	OAC rule 3745-31-05(A)(3) (PTI 14-05158)	0.10 lb of particulate emissions (PE)/PM10/hr* 0.44 ton/yr of PE/PM10* *The PE limitations for this emissions unit are based on the emissions unit's potential to emit (PTE). Therefore, no hourly record keeping is required to demonstrate compliance with these emission limitations. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible PE from the stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE from this emissions unit shall be vented to the baghouse.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 0.50 to 10 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform an inspection of the collection and control system on a weekly basis. The purpose of this inspection is to ensure its proper functioning. The results of this inspection shall be recorded in a log book.

2. 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). An audible alarm shall be maintained to notify the permittee of deviations of the baghouse pressure drop range specified in term A.II.1 while this emissions unit is in operation. An interlock system shall be operated that discontinues operation of this emissions unit during periods of time when the baghouse is operating outside the pressure drop range specified in term A.II.1.

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

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each week when the inspection of the collection and control system does not take place and the reason for not performing the inspection.

2. The permittee shall submit quarterly 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 in term A.II.1.

3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

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

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emission Limitations:
0.10 lb/hr of PE/PM10, 0.44 ton/yr of PE/PM10

Applicable Compliance Method:
Compliance with the hourly PE limitation of 0.10 lb/hr may be demonstrated by multiplying an emission factor of 0.0022 grain/dscf * by the air flow rate of 900 dscf/min and by 60 min/hr, and then dividing by 7000 grains/lb.

(0.0022 grain/dscf x 900 dscf/min x 60 min/hr / 7000 grain/lb = .017 lb of PE/hr)

*The emission factor of 0.0022 gr/dscf is based on stack testing conducted at the facility on 1/16/02 for a similar source.

Compliance with the annual PE limitation of 0.44 ton/yr may be demonstrated by multiplying the maximum hourly emission rate of 0.017 lb of PE/hr by 8760 hr/yr and then dividing by 2000 lbs/ton.

(0.017 lb of PE/hr x 8760 hr/yr / 2000 lbs/ton = .07 ton/yr of PE)

If required, compliance with the hourly PE limitation shall be demonstrated by stack testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

1.b Emission Limitation:
Visible PE shall not exceed 20% opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method
If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

1. Emissions units F004, F007, F008, F013, F015, and F016 are vented to a common baghouse.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Melting/Holding furnace (F017)

Activity Description: 2000 lb/hr Melting furnace

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
5.5 mmBtu/hr natural gas-fired melting furnace	OAC rule 3745-31-05(A)(3) (PTI 14-05367)	1.32 lbs of particulate emissions (PE)/PM10 emissions/hr* 5.78 tons/yr of PE/PM10 emissions * 0.83 lb of NOx/hr* 3.64 tons/yr of NOx* 0.006 lb of SO2/hr* 0.026 ton/yr of SO2* 0.022 lb of CO/hr* 0.1 ton/yr of CO* 0.039 lb of volatile organic compounds (VOC)/hr* 0.17 ton/yr of VOC* * The hourly and ton/yr emission limitations outlined above are based on the emissions unit's potentials to emit (PTE). Therefore, no hourly record keeping or additional monitoring or reporting requirements are necessary to demonstrate compliance with these emission limitations. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1), 3745-21-08 and 3745-23-06.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-07(A)(1)	The visible PE from any stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-18-06(E)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08(B)	None, see A.I.2.b below.
	OAC rule 3745-23-06(B)	None, see A.I.2.c below.

2. Additional Terms and Conditions

2.a As defined in 40 CFR 63.1503, any facility that only uses clean charge and does not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decorating kilns is not a secondary aluminum production facility.

2.b The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 14-05367.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 14-05367.

II. Operational Restrictions

1. The permittee shall only use clean charge in this emissions unit as defined in 40 CFR Part 63, Subpart RRR:

Clean charge means furnace charge materials including molten aluminum, T-bar, sow, ingot, billet, pig and alloying elements; aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 degrees C (650 degrees F) or higher; aluminum scrap delacquered/decoated at 482 degrees C (900 degrees F) or higher; and runaround scrap.

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

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following records:

a. Records that describe all of the charge materials.

b. Records that no sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decorating kilns are in operation.

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

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

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

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when "clean charge" is not used in this emissions unit. This report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

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

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:

1.a Emission Limitation:
Visible PE shall not exceed 20% opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method
If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitation:
1.32 lbs of PE/PM10/hr, 5.78 tons/yr of PE/PM10

Applicable Compliance Method:
The hourly limit is determined by summing the emissions from the melting aluminum, fluxing agent, and combustion of natural gas. The particulate emissions from melting aluminum may be determined by multiplying the emission factor, 1.1 lb/ton [derived from STAPPA/ALAPCO Air Quality Permits - A Handbook for Regulators and Industry, Volume II, Table 11-2 (5/30/91)], by the maximum rate or melting, 1 ton/hr. The particulate emissions from the fluxing agent mat be determined by multiplying the emission factor, 50 lb/ton [OEPA RACM guide, Table 2.11-1], by the amount of fluxing agent added per hour, 5 lb/hr, and dividing by 2000 lb/ton. The combustion of natural gas emissions may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mmcf/hr) by the AP-42 particulate emission factor for natural gas (1.9 lbs of filterable particulate matter/mmcf) from Section 1.4, Table 1.4-2, 7/98.

The annual emissions may be determined by multiplying the hourly emission rate by 8760 hr/yr and dividing by 2000 lb/ton.

If required, compliance with the lbs/hr emission limitation shall be demonstrated by stack testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

1.c Emission Limitation:
0.83 lb of NOx/hr, 3.64 tons/yr of NOx

Applicable Compliance Method:
The hourly emissions may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mmcf/hr) by the AP-42 nitrogen oxides emission factor for natural gas (100 lbs of nitrogen oxides/mmcf) from Section 1.4, Table 1.4-1, 7/98.

The annual emissions may be determined by multiplying the hourly emission rate by 8760 hr/yr and dividing by 2000 lb/ton.

If required, compliance with the lbs/hr emission limitation shall be demonstrated by stack testing conducted in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

1.d Emission Limitation:
0.006 lb of SO2/hr, 0.026 ton/yr of SO2

Applicable Compliance Method:
The hourly emissions may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mmcf/hr) by the AP-42 sulfur dioxide emission factor for natural gas (0.6 lb of sulfur dioxide/mmcf) from Section 1.4, Table 1.4-2, 7/98.

The annual emissions may be determined by multiplying the hourly emission rate by 8760 hr/yr and dividing by 2000 lb/ton.

If required, compliance with the lbs/hr emission limitation shall be demonstrated by stack testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

1.e Emission Limitation:
0.022 lb of CO/hr, 0.1 ton/yr of CO

Applicable Compliance Method:
The hourly emissions may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mmcf/hr) by the AP-42 carbon monoxide emission factor for natural gas (84 lbs of carbon monoxide/mmcf) from Section 1.4, Table 1.4-1, 7/98.

The annual emissions may be determined by multiplying the hourly emission rate by 8760 hr/yr and dividing by 2000 lb/ton.

If required, compliance with the lbs/hr emission limitation shall be demonstrated by stack testing conducted in accordance with Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A.

1.f Emission Limitation:
0.039 lb of VOC/hr, 0.17 ton/yr of VOC

Applicable Compliance Method:
The hourly emissions may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mmcf/hr) by the AP-42 volatile organic compound emission factor for natural gas (5.5 lbs of volatile organic compounds/mmcf) from Section 1.4, Table 1.4-2, 7/98.

The annual emissions may be determined by multiplying the hourly emission rate by 8760 hr/yr and dividing by 2000 lb/ton.

If required, compliance with the lbs/hr emission limitation shall be demonstrated by stack testing conducted in accordance with Methods 1 - 4 and 25 or 25A of 40 CFR, Part 60, Appendix A.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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

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