State of Ohio Environmental Protection Agency

RE: FINAL PERMIT TO INSTALL MODIFICATION **CERTIFIED MAIL**
HAMILTON COUNTY

Street Address: Mailing Address: Lazarus Gov. Center
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329

Application No: 14-05050

DATE: 12/13/2001

Willard Industries
Jim McDougal
1253 Knowlton Street
Cincinnati, OH 45223

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

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

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

Very truly yours,

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

CC: USEPA **HCDES**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install **Issue Date: 12/13/2001**
Terms and Conditions **Effective Date: 12/13/2001**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 14-05050

Application Number:	14-05050
APS Premise Number:	1431070580
Permit Fee:	**$2400**
Name of Facility:	Willard Industries
Person to Contact:	Jim McDougal
Address:	1253 Knowlton Street Cincinnati, OH 45223

Location of proposed air contaminant source(s) [emissions unit(s)]:
1253 Knowlton Street
Cincinnati, Ohio

Description of proposed emissions unit(s):
LFP aluminum pouring line, LFP sand shakeout, LFP sand handling, all emission units are vented to a baghouse.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

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

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

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. The operating conditions existing at the time of sampling or measurement.

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

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

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous

calendar quarters. See B.10 below if no deviations occurred during the quarter.

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

iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.
Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

declared invalid.

6. General Requirements

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

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

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

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

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

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are

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

9. Compliance Requirements

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

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

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

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

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

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

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

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

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

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

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

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35 , the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

B. State Only Enforceable Permit To Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

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

3. Permit Transfers

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

4. 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.

5. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

6. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

7. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

8. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

9. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

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

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

C. Permit To Install Summary of Allowable Emissions

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

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

Pollutant	Tons Per Year
PM/PM10	14.89
Organic Compounds	17.1

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Facility ID: **1431070580**

Emissions Unit ID: F004

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
F004 - LFP aluminum pouring w/baghouse - Modification	OAC rule 3745-31-05(A)(3)	See term A.I.2.a. for organic compound (OC) emission limitations. See term A.I.2.b. for the PM/PM-10 emission limitations. The collection efficiency shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point of capture to the extent possible with good engineering design. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-17-07(B)(1), and OAC rule 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 emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	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 organic compound emission rate for emissions unit F004 shall not exceed 16.11 lbs/hr*. The total combined hourly organic compound emission rate for emissions units F004, F007, and F008 shall not exceed 16.11 lbs/hr.

The total combined organic compound emission rate for emissions units F004, F007, and F008 shall not exceed 17.1 TPY, based upon a rolling, 12-month summation.

* The lbs of OC/hr emission limitation is based on the emissions unit potential to emit. Therefore, no hourly record keeping is required to demonstrate compliance with this emission limitation.

2.b The total PM/PM10 (fugitive +stack) from the aluminum pouring process(F004) shall not exceed 4.44 TPY based upon a rolling, 12-month summation.

The baghouse used to control particulate emissions from this emissions unit shall achieve an outlet emission rate of not greater than .030 grain of particulate emissions per dry standard cubic foot of exhaust gases.

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

2.d The fugitive visible particulate emissions from the aluminum pouring process (F004) shall not exceed twenty percent opacity as a three-minute average.

2.e Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a baghouse,and the aluminum production limitation.

II. Operational Restrictions

1. The emissions from the pouring operation shall be captured and vented to a baghouse in such a manner as to comply with the particulate emission limitations and 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 aluminum pouring rate. The permittee has existing records to demonstrate compliance with this limit upon issuance of this permit.

3. The pressure drop across the baghouse shall be maintained within the range of 0.50 -10 inches

of water while the emissions unit is in operation.

4. The maximum annual operating hours for this emissions unit shall not exceed 4350 hours, based upon a rolling, 12-month summation of the operating hours.

III. Monitoring and/or Record keeping Requirements

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

   a. The amount of aluminum poured, recorded in lbs. for each month

   b. The rolling, 12-month summation for the amount of aluminum poured, recorded in lbs. The rolling 12-month summation shall be calculated by adding the value recorded in line a. for the current months production to the value recorded in line a. for the previous 11-months of operation.

2. The permittee shall properly install, 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 inter-lock system shall be installed 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, 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 action to remedy the problem should also be noted in the log book.

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

   a. The operating hours for each month.

b. The rolling, 12-month summation of the operating hours. The rolling, 12-month summation shall be calculated by adding the value recorded in line a. for the current calendar months operation to the value recorded in line a. for the previous 11 calendar months of operation.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports for any monthly record demonstrating an exceedance of the 4.5 Million pound per year aluminum pouring limit specified in term A.II.2.

2. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in term A.II.3..

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

4. The permittee shall submit annual reports which specify the total combined OC emissions for emissions units F004, F007 and F008 for each month for the previous calendar year. These reports shall be submitted by January 31 of each year.

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

6. The permittee shall submit deviation (excursion) reports which identify any exceedance of the rolling, 12-month operating hours limitation in term A.II.4.

V. Testing Requirements

1. Compliance with the total combined organic compound emission limitation of 17.1 TPY shall be demonstrated by multiplying the lbs. of aluminum poured collected and recorded in term A.III.1. by the emission factor of 15.2 lbs. of OC/Ton of aluminum poured*.

   *The lbs. OC/Ton of aluminum poured is based on source specific stack testing results performed at Willard Industries on April 25, 2000 and September 13, 2000.

   Should additional stack testing be required to demonstrate compliance with the organic compound emission limitations in this permit, Method 18 of 40 CFR Part 60 Appendix A shall be used. Future stack testing to demonstrate compliance for this emission unit shall be performed when emissions units F004, F007, and F008 are running at maximum capacity. The stack testing performed shall be to demonstrate compliance with the total combined organic compound emission limit for emissions unit F004, F007, and F008 of 16.11 lbs/hr

2. Compliance with the particulate emissions limitation of 4.44 TPY may be demonstrated by multiplying the lbs PM/hr for the most recent stack test that demonstrated this emission unit to be in compliance by the hours of operation collected and recorded in term A.III.4 and dividing by 2000 lbs/ton.

3. Compliance with the visible particulate emission limitation for stack emissions shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 9.

4. Compliance with the fugitive visible particulate emission limitation shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 9. The Method 9 readings to determine compliance with the fugitive visible particulate emission limitation shall be taken at the point of egress to the atmosphere.

5. Compliance with the aluminum pouring limit in term A.II.2 shall be demonstrated by the recordkeeping in term A.III.1.

6. Compliance with the pressure drop limitation in term A.II.3 shall be demonstrated by the recordkeeping in term A.III.2.

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

   a. The emission testing shall be conducted with six-months after permit issuance.

   b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate emissions limit of 0.030 grains per dry standard cubic foot.

   c. Method 5 of 40 CFR Part 60, Appendix A, shall be employed to demonstrate compliance with the allowable mass emission rate. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County. All other emission units venting to the baghouse controlling emissions unit F004 shall be in operation during the stack test.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent

to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

8. Compliance with the hours of operation limit in term A.II.4 shall be demonstrated by the recordkeeping in term A.III.4.

VI. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 14-3936 as issued on October 25, 1995.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
F004 - LFP aluminum pouring w/baghouse		

2. Additional Terms and Conditions

2.a 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" pollutant(s):

   Pollutant: Benzene
   TLV (ug/m3): 1594
   Maximum Hourly Emission Rate (lbs/hr): 1.0

Emissions Unit ID: F004

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 23
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

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.).

2. 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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
F007 - LFP sand shakeout w/baghouse - Modification	OAC rule 3745-31-05(A)(3)	
		OAC rule 3745-17-11(B)(1)
	OAC rule 3745-17-07(A)(1)	
	OAC rule 3745-17-07(B)(1)	
	OAC rule 3745-17-08(B)(3)	

Applicable Emissions Limitations/Control Measures	
See term A.I.2.a. for organic compound (OC) emission limitations.	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
See term A.I.2.b. for the PM/PM10 emission limitations.	
The collection efficiency shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point of capture to the extent possible with good engineering design.	
The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-17-07(B)(1) and OAC rule 3745-17-08(B)(3).	
See term A.I.2.c.	
See term A.I.2.d.	
The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).	

2. Additional Terms and Conditions

2.a The hourly organic compound emission rate for emissions unit F007 shall not exceed 16.11 lbs/hr*. The total combined hourly organic compound emission rate for emissions units F004, F007, and F008 shall not exceed 16.11 lbs/hr.

The total combined organic compound emission rate for emissions units F004, F007, and F008 shall not exceed 17.1 TPY, based upon a rolling, 12-month summation.

* The lbs of OC/hr emission limitation is based on the emissions unit potential to emit. Therefore, no hourly record keeping is required to demonstrate

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2.b The total PM/PM10 (fugitive + stack) emissions from the sand shakeout area (F007) shall not exceed 2.21 TPY, based upon a rolling, 12-month summation.

The baghouse used to control particulate emissions from this emissions unit shall achieve an outlet emission rate of not greater than .030 grain of particulate emissions per dry standard cubic foot of exhaust gases.

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

2.d The fugitive visible particulate emissions from the sand shakeout area (F007) shall not exceed twenty percent opacity as a three-minute average.

2.e Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a baghouse, and the aluminum production limitation.

II. Operational Restrictions

1. The emissions from the sand shakeout operation shall be captured and vented to a baghouse in such a manner as to comply with the particulate emission limitations and 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 on a rolling, 12-month summation of the aluminum pouring rate. The permittee has existing records to demonstrate compliance with this limit upon issuance of this permit.

3. The pressure drop across the baghouse shall be maintained within the range of 0.5-10 inches of water while the emissions unit is in operation.

4. The maximum annual operating hours for this emissions unit shall not exceed 4350 hours, based upon a rolling, 12-month summation of the operating hours.

III. Monitoring and/or Record keeping Requirements

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

   a. The amount of aluminum poured, recorded in lbs. for each month

   b. The rolling, 12-month summation for the amount of aluminum poured, recorded in lbs. The rolling 12-month summation shall be calculated by adding the value recorded in line a. for the current months production to the value recorded in line a. for the previous 11-months of operation.

2. The permittee shall properly install, 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 inter-lock system shall be installed 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, 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 action to remedy the problem should also be noted in the log book.

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

   a. The operating hours for each month.

   b. The rolling, 12-month summation of the operating hours. The rolling, 12-month summation shall be calculated by adding the value recorded in line a. for the current calendar months operation to the value recorded in line a. for the previous 11 calendar months of operation.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports for any monthly record demonstrating an exceedance of the 4.5 Million pound per year aluminum pouring limit specified in term A.II.2.

2. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in term A.II.3..

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

4. The permittee shall submit annual reports which specify the total combined OC emissions for emissions units F004, F007 and F008 for each month for the previous calendar year. These reports shall be submitted by January 31 of each year.

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

6. The permittee shall submit deviation (excursion) reports which identify any exceedance of the rolling, 12-month operating hours limitation in term A.II.4.

V. Testing Requirements

1. Compliance with the total combined organic compound emission limitation of 17.1 TPY shall be demonstrated by multiplying the lbs of aluminum poured collected and recorded in term A.III.1. by the emission factor of 15.2 lbs. of OC/ Ton of aluminum poured*.

   *The lbs. OC/lbs. of aluminum poured is based on source specific stack testing results performed at Willard Industries on April 25, 2000 and September 13, 2000.

   Should additional stack testing be required to demonstrate compliance with the organic compound emission limitations in this permit, Method 18 of 40 CFR Part 60 Appendix A shall be used. Future stack testing to demonstrate compliance for this emission unit shall be performed when emissions units F004, F007, and F008 are running at maximum capacity. The stack testing performed shall be to demonstrate compliance with the total combined organic compound emission limit for emissions unit F004, F007, and F008 of 16.11 lbs/hr.

2. Compliance with the particulate emissions limitation of 2.21 TPY may be demonstrated by multiplying the lbs PM/hr for the most recent stack test that demonstrated this emission unit to be in compliance by the hours of operation collected and recorded in term A.III.4 and dividing by 2000 lbs/ton.

3. Compliance with the visible particulate emission limitation for stack emissions shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 9.

4. Compliance with the fugitive visible particulate emission limitation shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 9. The Method 9 readings to determine compliance with the fugitive visible particulate emission limitation shall be taken at the point of egress to the atmosphere.

5. Compliance with the aluminum pouring limit in term A.II.2 shall be demonstrated by the recordkeeping in term A.III.1.

6. Compliance with the pressure drop limitation in term A.II.3 shall be demonstrated by the recordkeeping in term A.III.2.

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

   a. The emission testing shall be conducted with six-months after permit issuance.

   b. The emission testing shall be conducted to demonstrate compliance with the allowable particulate emissions limit of 0.030 grains per dry standard cubic foot.

   c. Method 5 of 40 CFR Part 60, Appendix A, shall be employed to demonstrate compliance with the allowable mass emission rate. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County. All other emission units venting to the baghouse controlling emissions unit F007 shall be in operation during the stack test.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent

to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

8. Compliance with the hours of operation limit in term A.II.4 shall be demonstrated by the recordkeeping in term A.III.4.

VI. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 14-3936 as issued on October 25, 1995.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
F007 - LFP sand shakeout w/baghouse		

2. Additional Terms and Conditions

2.a None.

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. The permit to install for this emissions unit F007 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" pollutant(s):

   Pollutant: Benzene
   TLV (ug/m3): 1594
   Maximum Hourly Emission Rate (lbs/hr): 1.0
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 23
   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

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.).

2. 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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
F008 - LFP sand handling process w/baghouse - Modification	OAC rule 3745-31-05(A)(3)	See term A.I.2.a. for organic compound (OC) emission limitations. See term A.I.2.b. for the PM/PM-10 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(B)(1), and OAC rule 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 shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point of capture to the extent possible with good engineering design.
	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 organic compound emission rate for emissions unit F008 shall not exceed 16.11 lbs/hr*. The total combined hourly organic compound emission rate for emissions units F004, F007, and F008 shall not exceed 16.11 lbs/hr.

The total combined organic compound emission rate for emissions units F004, F007, and F008 shall not exceed 17.1 TPY, based upon a rolling, 12-month summation.

* The lbs of OC/hr emission limitation is based on the emissions unit potential to emit. Therefore, no hourly record keeping is required to demonstrate compliance with this emission limitation.

2.b The total PM/PM10 (fugitive + stack) emissions from the sand handling (F008) shall not exceed 8.24 TPY, based upon a rolling, 12-month summation.

The baghouse used to control particulate emissions from this emissions unit shall achieve an outlet emission rate of not greater than .030 grain of particulate emissions per dry standard cubic foot of exhaust gases.

2.c The visible particulate emissions from the stack associated with this emissions unit shall not exceed twenty per cent opacity, as a six-minute average, except as provided by rule.

2.d The fugitive visible particulate emissions from the sand handling process (F008) shall not exceed twenty percent opacity as a three-minute average.

2.e Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a baghouse,and the sand handling limitation.

II. Operational Restrictions

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

2. The maximum annual sand handling rate for this emissions unit shall not exceed 162,060 tons per year, based on a rolling 12-month summation of the sand handling rate. The permittee has existing records to demonstrate compliance upon issuance of this permit.

3. The pressure drop across the baghouse shall be maintained within the range of 0.5 -10 inches of water while the emissions unit is in operation.

4. The maximum annual operating hours for this emissions unit shall not exceed 4350 hours, based upon a rolling, 12-month summation of the operating hours.

III. Monitoring and/or Record keeping Requirements

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

   a. The amount of sand handled, recorded in lbs. for each month

   b. The rolling, 12-month summation for the amount of sand handled, recorded in lbs. The rolling 12-month summation shall be calculated by adding the value recorded in line a. for the current months production to the value recorded in line a. for the previous 11-months of operation.

2. The permittee shall properly install, 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 inter-lock system shall be installed 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, 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 action to remedy the problem should also be noted in the log book.

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

   a. The operating hours for each month.

   b. The rolling, 12-month summation of the operating hours. The rolling, 12-month summation shall be calculated by adding the value recorded in line a. for the current calendar months operation to the value recorded in line a. for the previous 11 calendar months of operation.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports for any monthly record demonstrating an exceedance of the 162,060 tons per year sand limit specified in term A.II.2.

2. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in term A.II.3.

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

4. The permittee shall submit annual reports which specify the total combined OC emissions for emissions units F004, F007 and F008 for each month for the previous calendar year. These reports shall be submitted by January 31 of each year.

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

6. The permittee shall submit deviation (excursion) reports which identify any exceedance of the rolling, 12-month operating hours limitation in term A.II.4.

V. Testing Requirements

1. Compliance with the total combined organic compound emission limitation of 17.1 TPY shall be demonstrated by multiplying the lbs of aluminum poured collected and recorded in term A.III.1. by the emission factor of 15.2 lbs of OC/ Ton of aluminum poured*.

   *The lbs OC/lbs of aluminum poured is based on source specific stack testing results performed at Willard Industries on April 25, 2000 and September 13, 2000.

   Should additional stack testing be required to demonstrate compliance with the organic compound emission limitations in this permit, Method 18 of 40 CFR Part 60 Appendix A shall be used. Future stack testing to demonstrate compliance for this emission unit shall be performed when emissions units F004, F007, and F008 are running at maximum capacity. The stack testing performed shall be to demonstrate compliance with the total combined organic compound emission limit for emissions unit F004, F007, and F008 of 16.11 lbs/hr

2. Compliance with the particulate emissions limitation of 8.24 TPY may be demonstrated by multiplying the lbs PM/hr for the most recent stack test that demonstrated this emission unit to be in compliance by the hours of operation collected and recorded in term A.III.4 and dividing by 2000 lbs/ton.

3. Compliance with the visible particulate emission limitation for stack emissions shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 9.

4. Compliance with the fugitive visible particulate emission limitation shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 9. The Method 9 readings to determine compliance with the fugitive visible particulate emission limitation shall be taken at the point of egress to the atmosphere.

5. Compliance with the aluminum pouring limit in term A.II.2 shall be demonstrated by the recordkeeping in term A.III.1.

6. Compliance with the pressure drop limitation in term A.II.3 shall be demonstrated by the recordkeeping in term A.III.2.

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

   i. The emission testing shall be conducted with six-months after permit issuance.

ii. The emission testing shall be conducted to demonstrate compliance with the allowable particulate emissions limit of 0.030 grains per dry standard cubic foot.

iii. Method 5 of 40 CFR Part 60, Appendix A, shall be employed to demonstrate compliance with the allowable mass emission rate. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County. All other emission units venting to the baghouse controlling emissions unit F008 shall be in operation during the stack test.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

VI. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 14-3936 as issued on October 25, 1995.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
F008 - LFP sand handling process w/baghouse		

2. Additional Terms and Conditions

2.a None.

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. The permit to install for this emissions unit F008 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" pollutant(s):

   Pollutant: Benzene
   TLV (ug/m3): 1594
   Maximum Hourly Emission Rate (lbs/hr): 1.0
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 23
   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

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.).

2. 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