Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

Certified Mail

2/10/2011

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)

Mr. Todd Piros
General Aluminum
5159 S. PROSPECT ST.
Rootstown, OH 44266

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1667070012
Permit Number: P0107606
Permit Type: Administrative Modification
County: Portage

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to “Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General’s Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

If you have any questions, please contact Akron Regional Air Quality Management District at (330)375-2480 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern

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

Cc: ARAQMD

Ohio | Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
General Aluminum

Facility ID:	1667070012
Permit Number:	P0107606
Permit Type:	Administrative Modification
Issued:	2/10/2011
Effective:	2/10/2011
Expiration:	8/16/2015

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install and Operate
for
General Aluminum

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Authorization

Facility ID: 1667070012
Application Number(s): M0001127
Permit Number: P0107606
Permit Description: Administrative modification of 5 natural gas fired aluminum reverberatory furnaces with varying heat input capacity and melt capacity. Administrative modification to include additional terms and conditions regarding OAC 3745-17-07(B) & 3745-31-05(D) inadvertently omitted from previous permit.
Permit Type: Administrative Modification
Permit Fee: $0.00
Issue Date: 2/10/2011
Effective Date: 2/10/2011
Expiration Date: 8/16/2015
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

General Aluminum
5159 S. PROSPECT ST.
Rootstown, OH 44266

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

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

Akron Regional Air Quality Management District
146 South High Street, Room 904
Akron, OH 44308
(330)375-2480

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0107606
Permit Description: Administrative modification of 5 natural gas fired aluminum reverberatory furnaces with varying heat input capacity and melt capacity. Administrative modification to include additional terms and conditions regarding OAC 3745-17-07(B) & 3745-31-05(D) inadvertently omitted from previous permit.

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

Emissions Unit ID: **F001**
Company Equipment ID: Eleven floor pouring and cooling operations.
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **F002**
Company Equipment ID: Pouring and Cooling line #1, rotating turn table.
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **F003**
Company Equipment ID: Pouring and Cooling line #1, rotating turn table.
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P001**
Company Equipment ID: 4.7 MMBtu/hr. Natural Gas Fired Burn Out Oven
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P901**
Company Equipment ID: #3 Aluminum Reverberator Furnace.
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P902**
Company Equipment ID: #1 Aluminum Reverberator Furnace.
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P903**
Company Equipment ID: #2 Aluminum Reverberator Furnace.
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P904**
Company Equipment ID: #4 Aluminum Reverberator Furnace.
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P905**
Company Equipment ID: #5 Aluminum Reverberator Furnace.
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P906**
Company Equipment ID: 15 casting and knock out stations.
Superseded Permit Number: P0106375

General Permit Category and Type: Not Applicable

Emissions Unit ID: **P907**
Company Equipment ID: Foundry core sand reclamation unit.
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P908**
Company Equipment ID: Sand break down line.
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P909**
Company Equipment ID: Cold box core making machine
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P910**
Company Equipment ID: Sand blast operation.
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P911**
Company Equipment ID: Cold box core making machine
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P912**
Company Equipment ID: Cold box core making machine
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P913**
Company Equipment ID: Cold box core making machine
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P914**
Company Equipment ID: Cold box core making machine
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P915**
Company Equipment ID: Cold box core making machine
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P916**
Company Equipment ID: Cold box core making machine
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P917**
Company Equipment ID: Cold box core making machine
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P918**
Company Equipment ID: Cold box core making machine
Superseded Permit Number: P0106375
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P919**
Company Equipment ID: Cold box core making machine

Superseded Permit Number:	P0106375
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

  You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a

renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Akron Regional Air Quality Management District in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting[1] a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

[1] Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

   a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

      (1) None.

   b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

      (1) None.

C. Emissions Unit Terms and Conditions

1. P001, 4.7 MMBtu/hr. Natural Gas Fired Burn Out Oven

Operations, Property and/or Equipment Description:

4.7 MMBtu/hr. Natural gas fired burn-out oven. (Modified)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC Rule 3745-31-05(A)(3) PTI 16-01897 issued 11/04/04	0.57 lb/hr SO_2, 2.48 tons/yr SO_2 0.30 lb/hr PE, 1.31 tons/yr PE 0.22 lb/hr phenol 0.72 tons/yr phenol 0.33 lb/hr VOC, 1.45 tons/yr VOC Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections b)(2)a through b)(2)e.
b.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC Rule 3745-31-05(A)(3).
c.	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).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-31-05(D)	See c)(2)

(2) Additional Terms and Conditions

a. Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average, except as specified by rule.

b. This facility is not located in an Appendix A area, therefore paragraph B of OAC rule 3745-17-08 does not apply. However, as a condition of Best Available Technology, the permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

c. The permittee shall minimize or eliminate visible particulate emissions of fugitive dust by employing best available control measures. These measures shall include, but not be limited to, the following:

i. The installation and use of hoods, fans and other equipment to adequately enclose, contain, capture and vent the fugitive dust; and

ii. The collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance, as described below. Ohio EPA may require additional control measures at any or all operations described above if deemed necessary based on observed visible emissions.

d. For each operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented at all times during operation. If the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that additional control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements, such additional control measures shall be implemented immediately. Any required implementation of the additional control measure(s) shall continue during operation until further observation confirms that use of these additional control measure(s) is unnecessary.

e. Specific additional control measures shall be determined by the permittee. Such additional control measures may include increased water application, use of chemical dust suppressant, or shut-down of operations. The use of additional control measures shall, at all times, comply with all air, surface water, ground water, solid waste, and hazardous waste laws and regulations. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) The permittee shall only fire natural gas as fuel in this emissions unit.

(2) The permittee has elected to restrict emissions of volatile organic compounds (VOCs) to less than 95.8 tons based upon a rolling, 12-month summation of the monthly VOC emissions to avoid Title V permitting requirements. In order to restrict emissions to below the Title V applicability threshold, the permittee has agreed to operational restrictions of 17,000 tons aluminum charged per rolling 12-month summation of the monthly for units F001, F002, F003, P901, P902, P903, P904, P905, P906, and P921 and 17,000 tons sand handled per rolling 12-month period for emissions units P907, P909, P911, P912, P913, P914, P915, P916, P917, P918, and P919.

d) Monitoring and/or Recordkeeping Requirements

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any abnormal visible emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions

(2) If any visible emissions in excess of 5 percent opacity are observed, corrective actions shall be employed to eliminate any visible emissions in excess of 5 percent opacity. These actions shall also be noted in the operations log.

(3) For the purpose of evaluating compliance with the established annual operating and VOC twelve month restrictions in (c)(2), the permittee shall collect and record the following information on a monthly basis:

a. The rolling, twelve month summation of aluminum charged in emissions units P901 through P905, in tons;

b. The rolling, twelve month summation of VOC emissions from emissions units F001, F002, F003, P001, P901, P902, P903, P904, P905, P906, P907, P909, P911, P912, P913, P914, P915, P916, P917, P918, P919, and P921.

e) Reporting Requirements

(1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the

due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number b)(2) above:

a. identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit;

b. visible emissions in excess of 5 percent opacity;

c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity.

(3) The permittee shall submit quarterly deviation (excursion) reports which include an identification of each monthly record for which the rolling twelve month summation of VOC emissions exceeded 95.8 tons.

(4) The permittee shall submit quarterly deviation (excursion) reports which include an identification of each monthly record for which the rolling twelve month aluminum charge and/or sand handled exceeded 17,000 tons.

(5) Deviation reports shall be submitted in accordance with the General Terms and Conditions.

f) Testing Requirements

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

a. Emission Limitation

0.30 lb/hr PE, 1.31 ton/yr PE

Applicable Compliance Method:

This emission limitation was developed from Walnut Street stack tests (8/93 & 2/98) as detailed in the May 2010 permit application. If required, compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with U.S. EPA Method 5, 40 CFR 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The annual emission limitation was developed by multiplying the hourly emission limit by 8760 hours and dividing by 2000 pounds per ton. Therefore, provided compliance with the hourly particulate emission limit is shown, compliance with the annual emission limitation shall also be demonstrated.

b. Emission Limitation:

0.57 lb/hr SO_2, 2.48 ton/yr SO_2

Applicable Compliance Method:

This emission limitation was developed from Walnut Street stack tests (8/93 & 2/98) as detailed in the May 2010 permit application. If required, compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with U.S. EPA Method 7 or 7E, 40 CFR 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA

The annual emission limitation was developed by multiplying the hourly emission limit by 8760 hours and dividing by 2000 pounds per ton. Therefore, provided compliance with the hourly SO_2 emission limit is shown, compliance with the annual emission limitation shall also be demonstrated.

c. Emission Limitation:

0.22 lb/hr phenol, 0.72 ton/yr phenol

Applicable Compliance Method:

This emission factor was developed from Walnut Street stack tests (8/93 & 2/98) as detailed in the May 2010 permit application. If required, compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 13A or 13B, 40 CFR 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year phenol emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the previous stack test results by the number hours the emissions unit operated during the year.

d. Emission Limitation:

0.33 lb/hr VOC, 1.45 tons/yr VOC

Applicable Compliance Method:

This emission factor was developed from Walnut Street stack tests (8/93 & 2/98) as detailed in the May 2010 permit application. If required, compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 25 or 25A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA

Compliance with the tons per year volatile organic compound emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the previous stack test results by the number of hours the emissions unit operated during the year.

e. Emission Limitation:

5% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance the visible particulate emission of fugitive dust limitation shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

2. P906, 15 casting and knock out stations.

Operations, Property and/or Equipment Description:

15 Casting and knock out stations. (Modified)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC Rule 3745-31-05(A)(3) PTI 16-01897 issued 11/04/04	Stack Emissions: 7.15 lb/hr VOC, 31.31 tons/yr VOC 0.96 lb/hr PE, 4.2 tons/yr PE Fugitive Emissions: 1.01 lb/hr VOC, 4.4 tons/yr VOC 0.38 lb/hr PE, 1.6 tons/yr PE See b)(2)a & b below
b.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC Rule 3745-31-05(A)(3).
c.	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).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-31-05(D)	See c)(3)

(2) Additional Terms and Conditions

a. Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average, except as specified by rule.

b. The permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

c) Operational Restrictions

(1) The pressure drop across the baghouse shall be maintained within the range of pressure drop established during the most recent emission test that demonstrated that the emissions unit was in compliance.

(2) All particulate emissions captured from this emissions unit shall be vented to the cartridge filters.

(3) The permittee has elected to restrict emissions of volatile organic compounds (VOCs) to less than 95.8 tons based upon a rolling, 12-month summation of the monthly VOC emissions to avoid Title V permitting requirements. In order to restrict emissions to below the Title V applicability threshold, the permittee has agreed to operational restrictions of 17,000 tons aluminum charged per rolling 12-month summation of the monthly for units F001, F002, F003, P901, P902, P903, P904, P905, P906, and P921 and 17,000 tons sand handled per rolling 12-month period for emissions units P907, P909, P911, P912, P913, P914, P915, P916, P917, P918, and P919.

d) Monitoring and/or Recordkeeping Requirements

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any abnormal visible emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions

(2) If any visible emissions in excess of 5 percent opacity are observed, corrective actions shall be employed to eliminate any visible emissions in excess of 5 percent opacity, these actions shall also be noted in the operations log.

(3) 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). The permittee shall record the pressure drop across the baghouse on a daily basis.

(4) For the purpose of evaluating compliance with the established annual operating and VOC twelve month restrictions in b)(1)(a), the permittee shall collect and record the following information on a monthly basis:

a. The rolling, twelve month summation of VOC emissions from emissions units F001, F002, F003, P001, P901, P902, P903, P904, P905, P906, P907, P909, P911, P912, P913, P914, P915, P916, P917, P918, P919, and P921.

e) Reporting Requirements

(1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number b)(2) above:

a. identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit;

b. visible emissions in excess of 5 percent opacity;

c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity.

(3) The permittee shall submit quarterly deviation (excursion) reports which include an identification of each monthly record for which the rolling twelve month summation of VOC emissions exceeded 95.8 tons.

(4) The permittee shall submit quarterly deviation (excursion) reports which include an identification of each monthly record for which the rolling twelve month aluminum charge and/or sand handled exceeded 17,000 tons.

(5) Deviation reports shall be submitted in accordance with the General Terms and Conditions.

f) Testing Requirements

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

a. Emission Limitation

0.96 lb/hr PE, 4.20 tons/Yr PE

Applicable Compliance Method:

If required, compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with U.S. EPA Method 5, 40 CFR 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The annual emission limitation was developed by multiplying the hourly emission limit by 8760 hours and dividing by 2000 pounds per ton. Therefore, provided compliance with the hourly particulate emission limit is shown, compliance with the annual emission limitation shall also be demonstrated.

b. Emission Limitation:

7.15 lb/hr VOC, 31.31 tons/yr VOC

Applicable Compliance Method:

If required, compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with U.S. EPA Method 25 or 25A, 40 CFR 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The annual emission limitation was developed by multiplying the hourly emission limit by 8760 hours and dividing by 2000 pounds per ton. Therefore, provided compliance with the hourly VOC emission limit is shown, compliance with the annual emission limitation shall also be demonstrated.

c. Emission Limitation:

5% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance the visible particulate emission of fugitive dust limitation shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply

for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

3. P907, Foundry core sand reclamation unit.

Operations, Property and/or Equipment Description:

Foundry core sand reclamation unit, consisting of the sand reclaimer, conveyors, hoppers, screen vibrator and elevator. (Modified)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC Rule 3745-31-05(A)(3) PTI 16-01897 issued 11/04/04	2.58 lb/hr PE (stack emissions). 0.11 lb/hr PE (fugitive emissions). 11.3 tons/yr Particulate Emissions Total 1.78 lb/hr VOC, including phenol (1.4 lb/hr stack, 0.38 lb/hr fugitive) 7.79 tons/yr VOC 1.30 lb/hr phenol, 5.70 tons/yr phenol 0.01 grain per dscf of exhaust gas or no visible particulate emissions from the control device exhaust stack, (whichever is less stringent). See b)(2)a & b)(2)b
b.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		rule 3745-31-05(A)(3).
c.	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).
d.	OAC rule 3745-17-08(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-31-05(D)	See c)(4)

(2) Additional Terms and Conditions

a. Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average, except as specified by rule.

b. The permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

c) Operational Restrictions

(1) The pressure drop across the baghouse shall be maintained within the range of pressure drop established during the most recent emission test that demonstrated that the emissions unit was in compliance.

(2) All particulate emissions captured from this emissions unit shall be vented to the cartridge filters.

(3) The permittee shall only fire natural gas as fuel in this emissions unit.

(4) The permittee has elected to restrict emissions of volatile organic compounds (VOCs) to less than 95.8 tons based upon a rolling, 12-month summation of the monthly VOC emissions to avoid Title V permitting requirements. In order to restrict emissions to below the Title V applicability threshold, the permittee has agreed to operational restrictions of 17,000 tons aluminum charged per rolling 12-month summation of the monthly for units F001, F002, F003, P901, P902, P903, P904, P905, P906, and P921 and 17,000 tons sand handled per rolling 12-month period for emissions units P907, P909, P911, P912, P913, P914, P915, P916, P917, P918, and P919.

d) Monitoring and/or Recordkeeping Requirements

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any abnormal visible emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions

(2) If any visible emissions in excess of 5 percent opacity are observed, corrective actions shall be employed to eliminate any visible emissions in excess of 5 percent opacity, these actions shall also be noted in the operations log.

(3) 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). The permittee shall record the pressure drop across the baghouse on a daily basis.

(4) The permit to install for this emissions unit (P907) 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 SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: phenol

TLV (mg/m^3): 19.245

Maximum Hourly Emission Rate (lb/hr): 1.17

Predicted 1-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 36.26

MAGLC ($\mu g/m^3$): 458.2

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 still 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 applying the "Air Toxic Policy" include the following:

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;

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

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.).

(5) If the permittee determines that the "Air Toxic Policy" will be satisfied for 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.

(6) For the purpose of evaluating compliance with the established annual operating and VOC twelve month restrictions in b)(1)(a), the permittee shall collect and record the following information on a monthly basis:

a. Total quantity of sand charged or handled in the sand reclaimer designated as emissions unit P907, in tons;

b. The rolling, twelve month summation of sand charged or handled in emissions unit P907, in tons;

c. The rolling, twelve month summation of VOC emissions from emissions units F001, F002, F003, P001, P901, P902, P903, P904, P905, P906, P907, P909, P911, P912, P913, P914, P915, P916, P917, P918, P919, and P921.

e) Reporting Requirements

(1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number b)(2) above:

a. identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit;

b. visible emissions in excess of 5 percent opacity;

c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity; and

d. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

(3) The permittee shall submit quarterly deviation (excursion) reports which include an identification of each monthly record for which the rolling twelve month summation of VOC emissions exceeded 95.8 tons.

(4) The permittee shall submit quarterly deviation (excursion) reports which include an identification of each monthly record for which the rolling twelve month aluminum charge and/or sand handled exceeded 17,000 tons.

(5) Deviation reports shall be submitted in accordance with the General Terms and Conditions.

f) Testing Requirements

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

a. Emission Limitation:

2.58 lb/hr PE (stack emissions), 0.11 lb/hr PE (fugitive emissions).

11.3 tons/yr Particulate Emissions Total

Applicable Compliance Method:

If required, compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with U.S. EPA Method 5, 40 CFR 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

Compliance with the tons per year particulate emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 5 test results by the number hours the emissions unit operated during the year.

b. Emission Limitation:

1.78 lb/hr VOC, (1.4 lb/hr stack, 0.38 lb/hr fugitive) 7.79 tons/yr VOC, including phenol

Applicable Compliance Method:

If required, compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with U.S. EPA Method 25 or 25A, 40 CFR 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

c. Emission Limitation:

1.17 lb/hr Phenol, 5.1 ton/yr Phenol

Applicable Compliance Method:

Multiply the emission factor of 0.005 pound of phenol per ton of aluminum melted in the furnace by the total amount of aluminum melted in the furnace. This Phenol emission factors was supplied by RMT Inc. Consultants for the permittee and was based on unspecified air testing at similar sources

The annual emission limitation was developed by multiplying the hourly emission limit by 8760 hours and dividing by 2000 pounds per ton. Therefore, provided compliance with the hourly Phenol emission limit is shown, compliance with the annual emission limitation shall also be demonstrated.

d. Emission Limitation:

5% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance the visible particulate emission of fugitive dust limitation shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None

4. P908, Sand break down line.

Operations, Property and/or Equipment Description:

Sand break down line, consisting of five belt conveyors, elevators a surge hopper, three vibra mills, and two sixty ton silos. (Modified)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC Rule 3745-31-05(A)(3) PTI 16-01897 issued 11/04/04	1.6 lb/hr PE (0.4 lb/hr fugitive and 1.2 lb/hr stack), 7.1 tons/yr PE 0.01 grain per dscf of exhaust gas or no visible particulate emissions from the control device exhaust stack, (whichever is less stringent). See b)(2)a below.
b.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	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).
d.	OAC rule 3745-17-08(B)	The emission limitation specified by this rule is less stringent than the emission

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average, except as specified by rule.

b. The permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

c) Operational Restrictions

(1) The pressure drop across the baghouse shall be maintained within the range of pressure drop established during the most recent emission test that demonstrated that the emissions unit was in compliance.

(2) All particulate emissions captured from this emissions unit shall be vented to the Baghouse.

(3) The permittee shall only fire natural gas as fuel in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any abnormal visible emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions

(2) If any visible emissions in excess of 5 percent opacity are observed, corrective actions shall be employed to eliminate any visible emissions in excess of 5 percent opacity, these actions shall also be noted in the operations log.

(3) 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). The permittee shall record the pressure drop across the baghouse on a daily basis.

e) Reporting Requirements

(1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number b) (2) above:

a. identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit;

b. visible emissions in excess of 5 percent opacity;

c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity; and

d. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

f) Testing Requirements

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

a. Emission Limitation:
1.6 lb/hr PE (0.4 lb/hr fugitive and 1.2 lb/hr stack)
7.1 tons/yr PE

Applicable Compliance Method:

If required, compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with U.S. EPA Method 5, 40 CFR 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The annual emission limitation was developed by multiplying the hourly emission limit by 8760 hours and dividing by 2000 pounds per ton. Therefore, provided compliance with the hourly particulate emission limit is shown, compliance with the annual emission limitation shall also be demonstrated.

b. Emission Limitation:
5% opacity as a 3-minute average

Applicable Compliance Method:
If required, compliance the visible particulate emission of fugitive dust limitation shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

5. P910, Sand blast operation.

Operations, Property and/or Equipment Description:

Sand blast operation in an enclosed cabinet. (Modified)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 16-01897 issued 11/04/04	0.64 lb/hr PE, 2.8 tons/yr PE (Fugitive) No visible emissions from the enclosure or the cartridge filter. See b)(2)a below.
b.	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).
c.	OAC rule 3745-17-08(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

a. The permittee shall employ best available technology that is sufficient to minimize or eliminate visible emissions of fugitive dust.

c) Operational Restrictions

(1) This emission unit shall only be operated with the enclosure closed, and the cartridge filters(s) in place.

(2) The blasting media used in this emissions unit, shall be a non silica based material.

d) Monitoring and/or Recordkeeping Requirements

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any abnormal visible emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions

(2) If any visible emissions are observed, corrective actions shall be employed to eliminate any visible emissions, these actions shall also be noted in the operations log.

e) Reporting Requirements

(1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number b) (2) above:

a. identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit;

b. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions,

f) Testing Requirements

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

a. Emission Limitation:

0.64 lb/hr PE, 2.8 tons/yr PE (Fugitive)

Applicable Compliance Method:

The particulate emission rate (PE) shall be determined by using the following equation except as otherwise provided below:

lb PE/hr = (A) x (B) x (1 - C) + (A) x (B) x(C) x (1-D)

where:

A = particulate emission factor of 15.5 pounds per ton of iron castings throughput, from Bernard S. Gutow Article, Modern Castings, January 1972;

B = hourly media usage rate, tons of sand media; and

c = percent capture efficiency use 99% (supplied by RMT consultants unless actual efficiency is available from stack test data.

D = control efficiency of fabric filter (use 99% control), except if actual efficiency is available from stack test data)

b. Emission Limitation:

No visible emissions.

Applicable Compliance Method:

If required, compliance the visible particulate emission of fugitive dust limitation shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

6. Emissions Unit Group - Casting pouring and cooling line: F001, F002, F003,

EU ID	Operations, Property and/or Equipment Description
F001	Pouring and cooling operations from furnaces #3 (P901) and #4 (P904). (Modified)
F002	Pouring and cooling line #1. Six devices with two molds each on a rotating turn table. (Modified)
F003	Pouring and cooling line # 2. Eight devices with two molds each on a rotating turn table. (Modified)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	For F001 - Eleven floor pouring and cooling operations. Five from furnaces #3 (P901), two from furnace #4 (P904), and four from Furnace #5(P905). OAC Rule 3745-31-05(A)(3) PTI 16-01897 issued 11/04/04	0.64 lb/hr SO_2, 2.79 ton/yr SO_2 1.79 lb/hr CO, 7.84 tons/yr CO 2.71 lb/hr VOC, 18.45 tons/yr VOC 0.43 lb/hr PE, 1.88 tons/yr PE 0.05 lb/hr Phenol, 0.22 tons/yr Phenol Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections b)(2)a through b)(2)f
b.	For F002 - Pouring and cooling line #1. Six devices with two molds each	0.41 lb/hr SO_2, 1.80 tons/yr SO_2

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	on a rotating turn table. OAC Rule 3745-31-05(A)(3) PTI 16-01897 issued 11/04/04	1.14 lb/hr CO, 5.00 tons/yr CO 1.74 lb/hr VOC, 18.45 tons/yr VOC 0.27 lb/hr PE, 1.18 tons/yr PE 0.03 lb/hr Phenol, 0.13 tons/yr Phenol Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Sections b)(2)a through b)(2)f.
c.	For F003 - Pouring and cooling line # 2. Eight devices with two molds each on a rotating turn table. OAC Rule 3745-31-05(A)(3) PTI 16-01897 issued 11/04/04	0.70 lb/hr SO_2, 7.45 tons/yr SO_2 4.76 lb/hr CO, 20.85 tons/yr CO 7.23 lb/hr VOC, 18.45 tons/yr VOC 1.13 lb/hr PE, 4.95 tons/yr PE 0.13 lb/hr Phenol, 0.57 tons/yr Phenol Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See Sections b)(2)a through b(2)f.
d.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	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).
f.	OAC rule 3745-17-08(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).
g.	OAC rule 3745-31-05(D)	See c)(1)

(2) Additional Terms and Conditions

a. Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average from any building opening or roof vent, except as specified by rule.

b. This facility is not located in an Appendix A area, therefore paragraph B of OAC rule 3745-17-08 does not apply. However, as a condition of Best Available Technology, the permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

c. The permittee shall minimize or eliminate visible particulate emissions of fugitive dust by employing best available control measures. These measures shall include, but not be limited to, the following:

i. The installation and use of hoods, fans and other equipment to adequately enclose, contain, capture and vent the fugitive dust; and

ii. The collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

d. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance, as described below. Ohio EPA may require additional control measures at any or all operations described above if deemed necessary based on observed visible emissions.

e. For each operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented at all times during operation. If the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that additional control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements, such additional control measures shall be implemented immediately. Any required implementation of the additional control measure(s) shall continue during operation until further observation confirms that use of these additional control measure(s) is unnecessary.

f. Specific additional control measures shall be determined by the permittee. Such additional control measures may include increased water application, use of chemical dust suppressant, or shut-down of operations. The use of additional control measures shall, at all times, comply with all air, surface water, ground water, solid waste, and hazardous waste laws and regulations. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC 3745-31-05(A)(3).

c) Operational Restrictions

(1) The permittee has elected to restrict emissions of volatile organic compounds (VOCs) to less than 95.8 tons based upon a rolling, 12-month summation of the monthly VOC emissions to avoid Title V permitting requirements. In order to restrict emissions to below the Title V applicability threshold, the permittee has agreed to operational restrictions of 17,000 tons aluminum charged per rolling 12-month summation of the monthly for units F001, F002, F003, P901, P902, P903, P904, P905, P906, and P921 and 17,000 tons sand handled per rolling 12-month period for emissions units P907, P909, P911, P912, P913, P914, P915, P916, P917, P918, and P919.

d) Monitoring and/or Recordkeeping Requirements

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any abnormal visible emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions

(2) If any visible emissions in excess of 5 percent opacity are observed, corrective actions shall be employed to eliminate any visible emissions in excess of 5 percent opacity, these actions shall also be noted in the operations log.

(3) The hourly and annual emission limitations outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.

(4) For the purpose of evaluating compliance with the established annual operating and VOC twelve month restrictions in b)(1), the permittee shall collect and record the following information on a monthly basis:

a. The rolling, twelve month summation of VOC emissions from emissions units F001, F002, F003, P001, P901, P902, P903, P904, P905, P906, P907, P909, P911, P912, P913, P914, P915, P916, P917, P918, P919, and P921.

e) Reporting Requirements

(1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number b)(2) above:

a. identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit;

b. visible emissions in excess of 5 percent opacity;

c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity; and

d. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

(3) The permittee shall submit quarterly deviation (excursion) reports which include an identification of each monthly record for which the rolling twelve month summation of VOC emissions exceeded 95.8 tons.

(4) The permittee shall submit quarterly deviation (excursion) reports which include an identification of each monthly record for which the rolling twelve month aluminum charge and/or sand handled exceeded 17,000 tons.

(5) Deviation reports shall be submitted in accordance with the General Terms and Conditions.

f) Testing Requirements

(1) Compliance with the emission limitations in sections b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
F001: 0.43 lb/hr PE, 1.88 tons/yr PE
F002: 0.27 lb/hr PE, 1.18 tons/yr PE
F003: 1.13 lb/hr PE, 4.95 tons/yr PE

Applicable Compliance Method:
Multiply the particulate emission factor of 0.34 pound of particulate emissions per ton of metal melted by the maximum hourly rate of metal melted. This particulate emission factors was based on air testing and emission factors at similar sources.

b. Emission Limitation:
F001: 0.64 lb/hr SO_2, 2.79 tons/yr SO_2
F002: 0.41 lb/hr SO_2, 1.80 tons/yr SO_2
F003: 0.70 lb/hr SO_2, 7.45 tons/yr SO_2

Applicable Compliance Method:
Multiply the sulfur dioxide emission factor of 0.51 pound of sulfur dioxide emissions per ton of metal melted by the maximum hourly rate of metal melted. This sulfur dioxide emission factors was based on air testing and emission factors at similar sources.

c. Emission Limitation:
F001: 1.79 lb/hr CO, 7.84 tons/yr CO
F002: 1.14 lb/hr CO, 5.00 tons/yr CO
F003: 4.76 lb/hr CO, 20.85 tons/yr CO

Applicable Compliance Method:
Multiply the carbon monoxide emission factor of 1.43 pound of carbon monoxide per ton of aluminum melted in the furnace by the total amount of aluminum melted in the furnace. This CO emission factors was based on air testing and emission factors at similar sources.

d. Emission Limitation:
F001: 2.71 lb/hr VOC, 18.45 tons/yr VOC
F002: 1.74 lb/hr VOC, 18.45 tons/yr VOC
F003: 7.23 lb/hr VOC, 18.45 tons/yr VOC

Applicable Compliance Method:
Compliance with the lb/hr limitation shall be determined by multiplying the volatile organic compounds emission factor of 2.17 pounds of VOC per ton of aluminum poured by the maximum rated capacity (1.25 tons/hr) of aluminum poured in the emissions unit. This VOC emission factor was based on air testing and emission factors at similar sources. Compliance with the annual emissions limitation shall be determined by multiplying the volatile organic compounds emission factor of 2.17 pounds VOC per ton of aluminum poured by the established operational restriction (17,000 tons/yr) of aluminum poured in the facility.

e. Emission Limitation:
5% opacity as a 3-minute average

Applicable Compliance Method:
If required, compliance the visible particulate emission of fugitive dust limitation shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

f. Emission Limitation:
F001: 0.05 lb/hr Phenol, 0.22 tons/yr Phenol
F002: 0.03 lb/hr Phenol, 0.13 tons/yr Phenol
F003: 0.13 lb/hr Phenol, 0.57 tons/yr Phenol

Applicable Compliance Method:
Multiply the phenol emission factor of 0.04 pound of phenol per ton of metal processed in the furnace by the total amount of metal processed ii the furnace. This phenol emission factor was based on air testing at similar sources

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

7. Emissions Unit Group - Core making machines: P909, P911, P912, P913, P914, P915, P916, P917, P918, P919,

EU ID	Operations, Property and/or Equipment Description
P909	Core making operations, using sand and Isoset with a SO_2 reactant. Consisting of a day silo, heater/cooler, elevators, ten hoppers, 10 core machines, mixers and conveyors. (Modified)
P911	Core making operations, using sand and Isoset with a SO_2 reactant. Consisting of a day silo, heater/cooler, elevators,hoppers, core machine, mixer and conveyors. MODIFIED
P912	Core making operations, using sand and Isoset with a SO_2 reactant. Consisting of a day silo, heater/cooler, elevators,hoppers, core machine, mixer and conveyors. MODIFIED
P913	Core making operations, using sand and Isoset with a SO_2 reactant. Consisting of a day silo, heater/cooler, elevators,hoppers, core machine, mixer and conveyors. MODIFIED
P914	Core making operations, using sand and Isoset with a SO_2 reactant. Consisting of a day silo, heater/cooler, elevators,hoppers, core machine, mixer and conveyors. MODIFIED
P915	Core making operations, using sand and Isoset with a SO_2 reactant. Consisting of a day silo, heater/cooler, elevators,hoppers, core machine, mixer and conveyors. MODIFIED
P916	Core making operations, using sand and Isoset with a SO_2 reactant. Consisting of a day silo, heater/cooler, elevators,hoppers, core machine, mixer and conveyors. MODIFIED
P917	Core making operations, using sand and Isoset with a SO_2 reactant. Consisting of a day silo, heater/cooler, elevators,hoppers, core machine, mixer and conveyors. MODIFIED
P918	Core making operations, using sand and Isoset with a SO_2 reactant. Consisting of a day silo, heater/cooler, elevators,hoppers, core machine, mixer and conveyors. MODIFIED
P919	Core making operations, using sand and Isoset with a SO_2 reactant. Consisting of a day silo, heater/cooler, elevators,hoppers, core machine, mixer and conveyors. MODIFIED

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 16-01897 issued 11/04/04	Total emissions for the ten core making machines (P009 and P011 through P019) shall not exceed the following. 6.7 lb/hr (PE) (total fugitive and stack), 29.4 tons/yr PE 1.18 lb/hr volatile organic compounds (VOC). (1.17 lb/hr stack, 0.12 lb/hr fugitive) 5.16 tons/yr volatile organic compounds. 0.22 lb/hr sulfur dioxide (SO_2) (0.214 lb/hr stack) 0.96 tons/yr sulfur dioxide. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Sections b)(2)a through b)(2)f.
b.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	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).
d.	OAC rule 3745-21-07(G)	Exempt per OAC rule 3745-21-07(G)(9)(h), see the requirements of OAC rule 3745-31-05(A)(3)
e.	OAC rule 3745-17-08(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).
f.	OAC rule 3745-31-05(D)	See c)(5)

(2) Additional Terms and Conditions

a. The permittee shall employ best available technology that is sufficient to minimize or eliminate visible emissions of fugitive dust.

c) Operational Restrictions

(1) The pressure drop across the baghouse serving emissions units P909 and P911 through P919 shall be maintained within the range of pressure drop established during the most recent emission test that demonstrated that the emissions unit was in compliance.

(2) All particulate emissions captured from emissions units P909 and P911 through P919 shall be vented to the fabric filter.

(3) The permittee shall use best engineering practices available to ensure the majority of SO_2 emissions are captured and vented serving emissions units P909 and P911 through P919 to a sulfur dioxide scrubber with 98% control efficiency.

(4) The pH of the scrubber liquor of the SO_2 scrubber serving emissions units P909 and P911 through P919 shall be maintained within the range of 6.0-10.5.

(5) The permittee has elected to restrict emissions of volatile organic compounds (VOCs) to less than 95.8 tons based upon a rolling, 12-month summation of the monthly VOC emissions to avoid Title V permitting requirements. In order to restrict emissions to below the Title V applicability threshold, the permittee has agreed to operational restrictions of 17,000 tons aluminum charged per rolling 12-month summation of the monthly for units F001, F002, F003, P901, P902, P903, P904, P905, P906, and P921 and 17,000 tons sand handled per rolling 12-month period for emissions units P907, P909, P911, P912, P913, P914, P915, P916, P917, P918, and P919.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse serving emissions units P909 and P911 through P919 while these emissions units are in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse serving emissions units P909 and P911 through P919 on a daily basis.

(2) The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pH of the scrubber liquor of the SO_2 scrubber serving emissions units P909 and P911 through P919 while these emissions units are in operation. The pH monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

a. The pH of the scrubber liquor, on a per shift basis.

b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

(4) For the purpose of evaluating compliance with the established annual operating and VOC twelve month restrictions in 7.c)(5), the permittee shall collect and record the following information on a monthly basis:

a. The rolling, twelve month summation of VOC emissions from emissions units F001, F002, F003, P001, P901, P902, P903, P904, P905, P906, P907, P909, P911, P912, P913, P914, P915, P916, P917, P918, P919, and P921.

e) Reporting Requirements

(1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number b) (2) above:

a. identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit;

b. visible emissions in excess of 5 percent opacity;

c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity; and

d. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

e. all periods of time during which the scrubber liquor pH of the SO_2 scrubber serving emissions units P909 and P911 through P919 did not comply with the pH requirements specified above.

(3) The permittee shall submit quarterly deviation (excursion) reports which include an identification of each monthly record for which the rolling twelve month summation of VOC emissions exceeded 95.8 tons.

(4) The permittee shall submit quarterly deviation (excursion) reports which include an identification of each monthly record for which the rolling twelve month aluminum charge and/or sand handled exceeded 17,000 tons.

(5) Deviation reports shall be submitted in accordance with the General Terms and Conditions.

f) Testing Requirements

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

a. Combined Stack Emission Limitation Serving Emissions Units P909 and P911 thru P919:

6.7 lb/hr PE, 29.4 tons/yr PE

Applicable Compliance Method:

If required, compliance with the pounds per hour emission limitation shall be obtained by stack testing in accordance with U.S. EPA Method 5, 40 CFR 60, Appendix A; alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

The annual emission limitation was developed by multiplying the hourly emission limit by 8760 hours and dividing by 2000 pounds per ton. Therefore, provided compliance with the hourly particulate emission limit is shown, compliance with the annual emission limitation shall also be demonstrated.

b. Combined Stack Emission Limitation Serving Emissions Units P909 and P911 thru P919:

0.22 lb/hr SO_2, 0.96 tons/yr SO_2

Applicable Compliance Method:

If required, compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with U.S. EPA Method 6, 40 CFR 60, Appendix A, Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

The annual emission limitation was developed by multiplying the hourly emission limit by 8760 hours and dividing by 2000 pounds per ton. Therefore, provided compliance with the hourly SO_2 emission limit is shown, compliance with the annual emission limitation shall also be demonstrated.

c. Combined Stack Emission Limitation Serving Emissions Units P909 and P911 thru P919:

1.2 lb/hr VOC, 5.3 tons/yr VOC

Applicable Compliance Method:

If required, compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with U.S. EPA Method 25 or 25A, 40 CFR 60, Appendix A; alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Multiply the volatile organic compounds emission factor obtained during the most recent emission test in pounds of VOC per ton of sand processed in the emissions unit by the total amount of sand recovered.

The annual emission limitation was developed by multiplying the hourly emission limit by 8760 hours and dividing by 2000 pounds per ton. Therefore, provided

compliance with the hourly VOC emission limit is shown, compliance with the annual emission limitation shall also be demonstrated.

d. Fugitive Emission Limitation Associated with Emissions Units P909 and P911 thru P919:

5 % opacity as a 3-minute average of fugitive emissions

Applicable Compliance Method:

Compliance with the visible particulate emissions limitation shall be accomplished in accordance with OAC rule 3745-17-03(B)(3).

e. Stack Emission Limitation Serving Emissions Units P909 and P911 thru P919:

No visible particulate emissions from the control device exhaust stack.

Applicable Compliance Method:

Compliance with the visible particulate emissions limitation shall be accomplished in accordance with OAC rule 3745-17-03(B)(4)

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

8. Emissions Unit Group - NG fired reverb ovens: P901, P902, P903, P904, P905,

EU ID	Operations, Property and/or Equipment Description
P901	Natural gas fired Aluminum Reverberator Furnace, 2.5 MMBtu/hr heat input capacity and 2.0 tons per hour melt capacity. Known as Furnace # 3. (Modified)
P902	Natural gas fired Aluminum Reverberator Furnace, 21 MMBtu heat input capacity and 4.5 tons per hour melt capacity. Known as Furnace # 1. (Modified)
P903	Natural gas fired Aluminum Reverberator Furnace, 21 MMBtu heat input capacity and 4.5 tons per hour melt capacity. Known as Furnace # 2. (Modified)
P904	Natural gas fired Aluminum Reverberator Furnace, 2.5 MMBtu heat input capacity and 2.0 tons per hour melt capacity. Known as Furnace # 4. (Modified)
P905	Natural gas fired Aluminum Reverberator Furnace, 4 MMBtu heat input capacity and 1.5 tons per hour melt capacity. Known as Furnace # 5. (Modified)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.1	P901 - Natural gas fired Aluminum Reverberator Furnace, 4-2.5 MMBtu/hr heat input capacity burners and 2.0 tons per hour melt capacity. Known as Furnace # 3 (ARF# 3). OAC Rule 3745-31-05(A)(3) PTI 16-01897 issued 11/04/04	0.54 lb/hr NO_x, 2.40 tons/yr NO_x 0.04 lb/hr VOC, 0.18 tons/yr VOC 0.004 lb/hr Fluoride(F) or Hydrogen Fluoride (HF), 0.018 tons/yr F or HF 0.48 lb/hr PE, 2.10 tons/yr PE Best available control measures that are sufficient to minimize or eliminate visible

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		emissions of fugitive dust (see Sections b)(2)a through b)(2)f.
a.2	P902 - Natural gas fired Aluminum Reverberator Furnace, 21 MMBtu heat input capacity and 4.5 tons per hour melt capacity. Known as Furnace # 1. OAC Rule 3745-31-05(A)(3) PTI 16-01897 issued 11/04/04	1.66 lb/hr NO_x, 7.30 tons/yr NO_x 0.12 lb/hr VOC, 0.53 tons/yr VOC 0.014 lb/hr F or HF, 0.06 tons/yr F or HF 1.46 lb/hr PE, 6.37 tons/yr PE Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See sections b)(2)a through b)(2)f.
a.3	P903 - Natural gas fired Aluminum Reverberator Furnace, 21 MMBtu heat input capacity and 4.5 tons per hour melt capacity. Known as Furnace # 2. OAC Rule 3745-31-05(A)(3) PTI 16-01897 issued 11/04/04	1.19 lb/hr NO_x, 5.22 tons/yr NO_x 0.08 lb/hr VOC, 0.36 tons/yr VOC 0.010 lb/hr F or HF, 0.044 tons/yr F or HF 1.05 lb/hr PE, 4.60 tons/yr PE Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See sections b)(2)a through b)(2)f.
a.4	P904 - Natural gas fired Aluminum Reverberator Furnace, 2.5 MMBtu heat input capacity and 2.0 tons per hour melt capacity. Known as Furnace # 4. OAC Rule 3745-31-05(A)(3) PTI 16-01897 issued 11/04/04	0.29 lb/hr NO_x, 1.27 tons/yr NO_x 0.02 lb/hr VOC, 0.11 tons/yr VOC 0.002 lb/hr F or HF, 0.01 tons/yr F or HF 0.26 lb/hr PE, 1.13 tons/yr PE Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See sections b)(2)a through b)(2)f.
a.5	P905 - Natural gas fired Aluminum Reverberator Furnace, 4 MMBtu heat input capacity and 1.5 tons per hour melt capacity. Known as Furnace # 5. OAC Rule 3745-31-05(A)(3) PTI 16-01897 issued 11/04/04	0.31 lb/hr NO_x, 1.34 tons/yr NO_x 0.02 lb/hr VOC, 0.09 tons/yr VOC 0.002 lb/hr F or HF, 0.009 tons/yr F or HF 0.27 lb/hr PE, 1.18 tons/yr PE Best available control measures that are sufficient to minimize or eliminate visible

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		emissions of fugitive dust. See sections b)(2)a through b)(2)f.
b.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	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).
d.	OAC rule 3745-17-08(B)	None, see b)(2)d below.
e.	OAC rule 3745-17-07(B)	None, see b)(2)d below.
f.	OAC rule 3745-31-05(D)	See c)(5)

(2) Additional Terms and Conditions

a. Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average, except as specified by rule.

b. Visible particulate emissions from the stack shall not exceed five percent opacity, as a three-minute average.

c. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

d. This facility is not located in an Appendix A area, therefore paragraph B of OAC rule 3745-17-08 does not apply. Also, pursuant to OAC rule 3745-17-07(B)(11)(e), the visible PE limitations specified in paragraph (B) of OAC rule 3745-17-07 do not apply to any fugitive dust source which is not located within the geographical areas specified in appendix A of rule 3745-17-08 of the administrative code.

e. The permittee shall minimize or eliminate visible particulate emissions of fugitive dust by employing best available control measures. These measures shall include, but not be limited to, the following:

i. The installation and use of hoods, fans and other equipment to adequately enclose, contain, capture and vent the fugitive dust; and

ii. The collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

f. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance, as described below. Ohio EPA may require additional control measures at any or all operations described above if deemed necessary based on observed visible emissions.

g. The Ohio EPA has determined that this facility may be subject to the requirements of an area source MACT/GACT rule that the Ohio EPA does not have the delegated authority to implement. Although Ohio EPA has determined that an area source MACT (also known as the GACT) may apply, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised that all requirements associated with these rules are in effect and are enforceable by U.S. EPA. For more information on the area source rules, please refer to the following U.S. EPA website: http://www.epa.gov/ttn/atw/area/arearules.html

c) Operational Restrictions

(1) The permittee shall only fire natural gas as fuel in this emissions unit.

(2) The aluminum melting furnace shall be charged with clean, ingots, bar stock, dry, sawed-off pieces of solid aluminum, aluminum chips and turnings from machining. Materials bearing oil, grease, paint, or paper shall not be employed.

(3) Chlorine shall not be added for demagging the aluminum.

(4) Alloying, if any performed in this emissions unit, shall be done employing only clean materials.

(5) The permittee has elected to restrict emissions of volatile organic compounds (VOCs) to less than 95.8 tons based upon a rolling, 12-month summation of the monthly VOC emissions to avoid Title V permitting requirements. In order to restrict emissions to below the Title V applicability threshold, the permittee has agreed to operational restrictions of 17,000 tons aluminum charged per rolling 12-month summation of the monthly for units F001, F002, F003, P901, P902, P903, P904, P905, P906, and P921 combined, and 17,000 tons sand handled per rolling 12-month period for emissions units P907, P909, P911, P912, P913, P914, P915, P916, P917, P918, and P919 combined.

d) Monitoring and/or Recordkeeping Requirements

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

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

e. any corrective actions taken to eliminate the visible emissions

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

a. The color of the emissions;

b. Whether the emissions are representative of normal operations

c. If the emissions are not representative of normal operations, the cause of the abnormal emissions

d. The total duration of any visible emission incident; and

e. Any corrective actions taken to eliminate the visible emissions.

(3) For the purpose of evaluating compliance with the annual operating and VOC emissions limitation and the annual restrictions on the amount of aluminum charged and the amount of sand handled, the permittee shall collect and record the following information on a monthly basis:

a. The total quantity of aluminum charged in all aluminum reverb furnaces designated as emissions units P901 through P905 and P921 combined, in tons;

b. The total quantity of mold sand handled in emissions units P907, P909, P911, P912, P913, P914, P915, P916, P917, P918, and P919 combined, in tons;

c. The rolling, 12-month summation of mold sand handled in emissions units P907, P909, P911, P912, P913, P914, P915, P916, P917, P918, and P919 combined, in tons;

d. The rolling, twelve month summation of aluminum charged in emissions units P901 through P905 and P921 combined, in tons;

e. The rolling, twelve month summation of VOC emissions from emissions units F001, F002, F003, P001, P901, P902, P903, P904, P905, P906, P907, P909, P911, P912, P913, P914, P915, P916, P917, P918, P919, and P921 combined, calculated in accordance with the methodology as outlined in f)(1) of this permit.

e) Reporting Requirements

(1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number b)(2) above:

a. all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit;

b. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;

c. describe any corrective actions taken to eliminate the visible fugitive particulate emissions;

d. describe any corrective actions taken to eliminate the visible particulate emissions; and

e. any instances where any materials other than clean aluminum ingots, bar stock and dry, sawed-off pieces of solid aluminum, aluminum chips and turnings from machining, or clean alloying materials were charged into this emissions unit.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. All deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, recordkeeping and/or testing requirements in this permit:

i. The rolling, 12-month aluminum charge and/or sand handled of 17,000 tons; and

ii. The rolling, 12-month summation of VOC emissions of 95.8 tons.

b. The probable cause of each deviation (excursion);

c. Any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. The magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

(4) The quarterly reports shall be submitted electronically through Ohio EPA Air Services each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director.

f) Testing Requirements

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

a. Stack Emission Limitation:

P901: 0.48 lb/hr PE, 2.10 tons/yr PE
P902: 1.46 lb/hr PE, 6.39 tons/yr PE

P903: 1.05 lb/hr PE, 4.60 tons/yr PE
P904: 0.27 lb/hr PE, 1.18 tons/yr PE
P905: 0.27 lb/hr PE, 1.18 tons/yr PE

Compliance Method:

If required, compliance with the pounds per hour emission limitation shall be obtained by stack testing in accordance with U.S. EPA Method 5, 40 CFR 60, Appendix A; alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The annual emission limitation was developed by multiplying the hourly emission limit by 8760 hours and dividing by 2000 pounds per ton. Therefore, provided compliance with the hourly particulate emission limit is shown, compliance with the annual emission limitation shall also be demonstrated.

b. Emission Limitation:

P901: 0.54 lb/hr NO_x, 2.40 tons/yr NO_x
P902: 1.66 lb/hr NO_x, 7.30 tons/yr NO_x
P903: 1.19 lb/hr NO_x, 5.22 tons/yr NO_x
P904: 0.29 lb/hr NO_x, 1.27 tons/yr NO_x
P905: 0.31 lb/hr NO_x, 1.34 tons/yr NO_x

Applicable Compliance Method:

If required, compliance with the pounds per hour emission limitation shall be obtained by stack testing in accordance with U.S. EPA Method 7, 40 CFR 60, Appendix A; alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The annual emission limitation was developed by multiplying the hourly emission limit by 8760 hours and dividing by 2000 pounds per ton. Therefore, provided compliance with the hourly NO_x emission limit is shown, compliance with the annual emission limitation shall also be demonstrated.

c. Emission Limitation:

P901: 0.04 lb/hr VOC, 0.18 tons/yr VOC
P902: 0.12 lb/hr VOC, 0.53 tons/yr VOC
P903: 0.08 lb/hr VOC, 0.36 tons/yr VOC
P904: 0.02 lb/hr VOC, 0.09 tons/yr VOC
P905: 0.02 lb/hr VOC, 0.09 tons/yr VOC

Applicable Compliance Method:

Compliance with the lb/hr limitation shall be determined by multiplying the VOC emission factor of 2.17 pounds of VOC per ton of aluminum poured by the maximum rated capacity of aluminum poured in the emissions unit. This VOC emission factor was based on air testing and emission factors at similar sources.

The annual emission limitation was developed by multiplying the hourly emission limit by 8760 hours and dividing by 2000 pounds per ton. Therefore, provided compliance with the hourly VOC emission limit is shown, compliance with the annual emission limitation shall also be demonstrated.

P901: 0.004 lb/hr F or HF, 0.018 tons/yr F or HF
P902: 0.014 lb/hr F or HF, 0.06 tons/yr F or HF
P903: 0.010 lb/hr F or HF, 0.044 tons/yr F or HF
P904: 0.002 lb/hr F or HF, 0.01 tons/yr F or HF
P905: 0.002 lb/hr F or HF, 0.01 tons/yr F or HF

Applicable Compliance Method:

If required, compliance with the pounds per hour emission limitation shall be obtained by stack testing in accordance with U.S. EPA Method 13A or 13B, 40 CFR 60, Appendix A; alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The annual emission limitation was developed by multiplying the hourly emission limit by 8760 hours and dividing by 2000 pounds per ton. Therefore, provided compliance with the hourly fluoride emission limit is shown, compliance with the annual emission limitation shall also be demonstrated.

d. Emission Limitation:

5% opacity as a 3-minute average

Applicable Compliance Method:

Compliance with the visible particulate emissions limitation shall be accomplished in accordance with OAC rule 3745-17-03(B)(4)

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.