



Environmental
Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

Certified Mail

2/8/2011

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

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1667070012
Permit Number: P0107308
Permit Type: Initial Installation
County: Portage

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

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Record Courier. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and Akron Regional Air Quality Management District
146 South High Street, Room 904
Akron, OH 44308

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Akron Regional Air Quality Management District at (330)375-2480.

Sincerely,

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
ARAQMD; Pennsylvania; West Virginia; Canada



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description: **General Aluminum** is an existing facility located in the city of Akron, Summit County. **General Aluminum** has requested a Federally Enforceable State Operating Permit for an aluminum foundry. The facility consists of the following emission units:

F001	Eleven floor pouring and cooling operations.
F002	Pouring and Cooling line #1, rotating turn table.
F003	Pouring and Cooling line #1, rotating turn table.
P001	4.7 MMBtu/hr. Natural Gas Fired Burn Out Oven
P901	#3 Aluminum Reverberator Furnace.
P902	#1 Aluminum Reverberator Furnace.
P903	#2 Aluminum Reverberator Furnace.
P904	#4 Aluminum Reverberator Furnace.
P905	#5 Aluminum Reverberator Furnace.
P906	15 casting and knock out stations.
P907	Foundry core sand reclamation unit.
P908	Sand break down line.
P909	Cold box core making machine
P910	Sand blast operation.
P911	Cold box core making machine
P912	Cold box core making machine
P913	Cold box core making machine
P914	Cold box core making machine
P915	Cold box core making machine
P916	Cold box core making machine
P917	Cold box core making machine
P918	Cold box core making machine
P919	Cold box core making machine
P920	Shot blasting Operation
P921	#6 Aluminum Reverberator Furnace.

All operating emissions units are included in the FESOP, except the deminimis units, however the emissions from the Deminimis units is accounted for in the facility wide emission calculations

3. **Facility Emissions and Attainment Status:** The location of the facility is currently designated as attainment for all criteria pollutants. The emissions from this facility are volatile organic compounds from



the sand processing and mixing equipment. The facility is asking to have the maximum allowable emissions volatile organic materials limited to than 95.8 tons based upon a rolling 12-month summation, and therefore avoid Title V of the 1990 Clean Air Act.

- 4. Source Emissions: The source emits Particulate Emissions (PE), Nitrogen Oxides (NOx), Sulfur Dioxide (SO2), and Volatile Organic Compounds (VOC). Of these the emissions of VOC and PE could be emitted in over 100 tons per year, therefore the permittee has requested operational restriction to limit sand and aluminum to reduce these emissions to less than major source thresholds.
5. Conclusion: The facility has applied for this FESOP to request federally enforceable terms and conditions in order to limit VOC emissions beneath major source thresholds. After obtaining this FESOP, facility-wide combined VOC Allowable emissions are 95.8 TPY. VOC and PE emissions have been limited through a restriction on aluminum and sand usage rates, as well as the use of control devices to control PE, and SO2.
6. Please provide additional notes or comments as necessary:
None
7. Total Permit Allowable Emissions Summary (for informational purposes only):

Due to the restrictions requested above, the total facility "potential to emit" (with applicable control devices) will be limited to:

Table with 2 columns: Pollutant and Tons Per Year. Rows include: Particulate Matter (PM)* (86.7 TPY), Sulfur Dioxide (SO2) (34.9 TPY), Nitrogen Oxides (NOx) (28.0 TPY), Carbon Monoxide (CO) (69.1 TPY), Volatile Organic Compounds (VOCs) (95.8 TPY), Hydrogen Fluoride (HF) (2.9 TPY), Phenol (2.9 TPY).

* includes fugitive emissions

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install and Operate
General Aluminum

Issue Date: 2/8/2011
Permit Number: P0107308
Permit Type: Initial Installation
Permit Description: Initial installation of a natural gas fired aluminum reverberatory furnace with 10 MMBTU/hr heat input capacity and 2.75 TPH (5,500 lb/hr) melt capacity.
Facility ID: 1667070012
Facility Location: General Aluminum
5159 S. PROSPECT ST.,
Rootstown, OH 44266
Facility Description: Aluminum Foundries (except Die-Casting)

Scott J. Nally, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio has issued a draft action of an air pollution control, federally enforceable permit-to-install and operate (PTIO) for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Duane LaClair at Akron Regional Air Quality Management District, 146 South High Street, Room 904, Akron, OH 44308 or (330)375-2480. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc

Ohio

**Environmental
Protection Agency**

DRAFT

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

Facility ID:	1667070012
Permit Number:	P0107308
Permit Type:	Initial Installation
Issued:	2/8/2011
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance



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

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Authorization

Facility ID: 1667070012
Application Number(s): A0040673
Permit Number: P0107308
Permit Description: Initial installation of a natural gas fired aluminum reverberatory furnace with 10 MMBTU/hr heat input capacity and 2.75 TPH (5,500 lb/hr) melt capacity.
Permit Type: Initial Installation
Permit Fee: \$750.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 2/8/2011
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

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: P0107308

Permit Description: Initial installation of a natural gas fired aluminum reverberatory furnace with 10 MMBTU/hr heat input capacity and 2.75 TPH (5,500 lb/hr) melt capacity.

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

Emissions Unit ID:	P921
Company Equipment ID:	Aluminum Reverb Furnace #6
Superseded Permit Number:	
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 submitting¹ 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.

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.

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).

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. P921, Aluminum Reverb Furnace #6

Operations, Property and/or Equipment Description:

Natural gas-fired aluminum reverberatory furnace with 10 MMBTU/hr heat input capacity and 2.75 TPH (5,500 lb/hr) melt capacity.

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 operation(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 are identified below. 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)	<p>Nitrogen oxides (NO_x) emissions shall not exceed 1.07 lb/hr and 4.70 tpy.</p> <p>Volatile organic compounds (VOC) emissions shall not exceed 1.90 lbs/hr and 8.31 tpy.</p> <p>Fluoride (F) or hydrogen fluoride (HF) emissions shall not exceed 0.17 lb/hr and 0.72 tpy.</p> <p>Particulate emissions (PE) from this emissions unit shall not exceed 3.22 lb/hr, 14.09 ton PE per year</p> <p>Visible PE from any stack shall not exceed 5% opacity, as a 6-minute average.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		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)	See b)(2)g. below
c.	OAC rule 3745-17-11(B)	See b)(2)g. below
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)(1).

(2) Additional Terms and Conditions

- a. Visible PE of fugitive dust shall not exceed five percent opacity, as a three-minute average, except as specified by rule.
- b. Visible PE 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 PE 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 PE 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 equally-effective 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 emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

- h. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- i. The Ohio EPA has determined that this facility may be applicable 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 follow U.S. EPA website: <http://www.epa.gov/ttn/atw/area/arearules.html>
- c) Operational Restrictions
- (1) The permittee shall not emit more than 95.8 tons of VOCs per rolling, 12-month summation of the monthly VOC emission rates for the entire facility. 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 charge rates for emissions units F001, F002, F003, P901, P902, P903, P904, P905, P906, and P921 (ARF #6), combined, and 17,000 tons sand handled per rolling 12-month summation for emissions units P907, P909, P911, P912, P913, P914, P915, P916, P917, P918, and P919, combined.
 - (2) The permittee has existing records sufficient to begin calculating and tracking the rolling, 12-month restrictions for aluminum charged and for sand handled and; therefore, the permittee does not need to be limited to monthly amounts of aluminum charged or sand handled for the first year.
 - (3) The permittee shall only fire natural gas as fuel in this emissions unit.
 - (4) 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.
 - (5) Chlorine shall not be added for the purpose of demagging the aluminum.
 - (6) Alloying, if any performed in this emissions unit, shall be done employing only clean materials.

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 VOC emission 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. Total quantity of aluminum charged in all aluminum reverb furnaces designated as emissions units P901 through P905, and P921, combined in tons;
 - b. The 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 aluminum charged in emissions units P901 through P905, and P921, combined, in tons;

- d. 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;
- e. The rolling, 12-month VOC emissions, in tons, from emissions units F001, F002, F003, P001, P901, P902, P903, P904, P905, P906, P907, P909, P911, P912, P913, P914, P915, P916, P917, P918, P919, P921, P020 and P021, combined, calculated in accordance with the methodology as outlined in f)(1)c. 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 d) above:
 - a. all days during which any 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 particulates 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, record keeping 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.

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 (the appropriate District Office or local air agency).

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. Emission Limitations:

3.22 lb/hr PE, 14.09 tons/yr PE

Compliance Method:

If required, compliance with the pounds per hour emission limitation above shall be obtained by stack testing in accordance with U.S. EPA Methods 1- 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 limitation by 8760 hours, and then dividing by 2000 pounds per ton. Therefore, provided compliance with the hourly particulate emissions limitation is maintained, compliance with the annual emission limitation shall also be demonstrated.

- b. Emission Limitations:

1.07 lb/hr NO_x, 4.70 tons/yr NO_x

Applicable Compliance Method:

If required, compliance with the pounds per hour NO_x emission limitation above shall be based on the results of emission testing conducted in accordance with U.S. EPA Methods 1-4 and 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 then 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 Limitations:

1.90 lb/hr VOC, 8.31 tons/yr VOC

Applicable Compliance Method:

Compliance with the lb/hr VOC emission 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 then 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. Emission Limitations:

F or HF emissions shall not exceed 0.17 lbs/hr and 0.72 tpy

Applicable Compliance Method:

If required, compliance with the pounds per hour emission limitation above 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 then 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.

e. Emission Limitation:

Visible PE from any stack shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be demonstrated in accordance with Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the OAC rule 3745-114 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.