



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

12/3/2012

Grant Hatfield
PRECISION ALUMINUM, INC.
733 Weber Drive
Wadsworth, OH 44281

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1652100075
Permit Number: P0111972
Permit Type: Renewal
County: Medina

Certified Mail

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

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) 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. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTIO 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
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

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.

Sincerely,



Michael W. Ahern, Manager

Permit Issuance and Data Management Section, DAPC

Cc: ARAQMD



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
PRECISION ALUMINUM, INC.**

Facility ID:	1652100075
Permit Number:	P0111972
Permit Type:	Renewal
Issued:	12/3/2012
Effective:	12/3/2012
Expiration:	12/3/2022



Division of Air Pollution Control
Permit-to-Install and Operate
for
PRECISION ALUMINUM, INC.

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Final Permit-to-Install and Operate
PRECISION ALUMINUM, INC.
Permit Number: P0111972
Facility ID: 1652100075
Effective Date: 12/3/2012

Authorization

Facility ID: 1652100075
Application Number(s): A0046134
Permit Number: P0111972
Permit Description: Renewal PTIO for an aluminum melting furnace, sand unloading, storage and mold operations, and a mold wash spray booth.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 12/3/2012
Effective Date: 12/3/2012
Expiration Date: 12/3/2022
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

PRECISION ALUMINUM, INC.
733 WEBER DR.
WADSWORTH, OH 44281

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

Ohio Environmental Protection Agency (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



Final Permit-to-Install and Operate
PRECISION ALUMINUM, INC.
Permit Number: P0111972
Facility ID: 1652100075
Effective Date: 12/3/2012

Authorization (continued)

Permit Number: P0111972

Permit Description: Renewal PTIO for an aluminum melting furnace, sand unloading, storage and mold operations, and a mold wash spray booth.

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:	Furnace #1
Superseded Permit Number:	P0101870
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P901
Company Equipment ID:	Sand Operations
Superseded Permit Number:	P0101870
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	R001
Company Equipment ID:	Spray Booth
Superseded Permit Number:	P0101871
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
PRECISION ALUMINUM, INC.
Permit Number: P0111972
Facility ID: 1652100075
Effective Date: 12/3/2012

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.

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.



Final Permit-to-Install and Operate
PRECISION ALUMINUM, INC.
Permit Number: P0111972
Facility ID: 1652100075
Effective Date: 12/3/2012

B. Facility-Wide Terms and Conditions



Final Permit-to-Install and Operate
PRECISION ALUMINUM, INC.
Permit Number: P0111972
Facility ID: 1652100075
Effective Date: 12/3/2012

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.



Final Permit-to-Install and Operate
PRECISION ALUMINUM, INC.
Permit Number: P0111972
Facility ID: 1652100075
Effective Date: 12/3/2012

C. Emissions Unit Terms and Conditions



1. F001, Furnace #1

Operations, Property and/or Equipment Description:

Schaefer aluminum melting furnace - Sure-Lite Model #300 Melting Furnace

- 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) (PTI 16-922 issued 5/15/1991)	Chlorine emissions shall not exceed 0.5 pounds per hour. Hydrogen chloride emissions shall not exceed 0.3 pounds per hour. Particulate emissions (PE) shall not exceed 0.9 tons per year. Visible particulate emissions from any fugitive dust source shall not exceed 10% opacity as a 3-minute average.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-07(B)	The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rule



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		3745-31-05.
d.	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures to minimize or eliminate visible emissions of fugitive dust.
e.	OAC rule 3745-17-11	The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05.
f.	40 CFR Part 63, Subpart RRR	See b)(2)a.

(2) Additional Terms and Conditions

a. This affected emissions unit (EU) is designated as a Group 1 furnace under 40 CFR part 63 subpart RRR because it processes clean charge using a reactive flux. However, because the EU melts only clean aluminum scrap, subpart RRR does not apply.

c) Operational Restrictions

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

(2) The permittee shall process only clean charge in this emissions unit. Per 40 CFR 63.1503, clean charge means furnace charge materials, including molten aluminum; T-bar; sow; ingot; billet; pig; alloying elements; aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 °C (650 °F) or higher; aluminum scrap delacquered/decoated at 482 °C (900 °F) or higher, and runaround scrap.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and



- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

- (2) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (3) For each day during which the permittee processes a metal other than clean charge aluminum, as defined above and in 40 CFR 63.1503, the permittee shall maintain a record of the type and quantity of metal processed in this emissions unit.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (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 d)(1) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
 - b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.
- (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the recordkeeping requirements in term numbers d)(2) and d)(3) above:



- a. all instances in which a fuel other than natural gas was burned in this emissions unit;
- b. all instances in which any materials other than clean aluminum material defined in term c)(2) above were charged into this emission unit.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule; and visible particulate emissions from any fugitive dust source shall not exceed 10 percent opacity as a three-minute average.

Applicable Compliance Method:

Compliance with the visible particulate emissions limitations shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

b. Emission Limitation:

Chlorine emissions shall not exceed 0.5 pounds per hour.

Applicable Compliance Method:

If required, compliance with the hourly allowable chlorine emission limitation above shall be determined by using the test method(s) and procedures in Methods 1-4 and 26 or 26A, as appropriate, of 40 CFR Part 60, Appendix A.

c. Emission Limitation:

Hydrogen chloride emissions shall not exceed 0.3 pounds per hour.

Applicable Compliance Method:

If required, compliance with the hourly allowable hydrogen chloride emission limitation above shall be determined by using the test method(s) and procedures in Methods 1-4 and 26 or 26A, as appropriate, of 40 CFR Part 60, Appendix A.

d. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.9 tons per year.



Final Permit-to-Install and Operate
PRECISION ALUMINUM, INC.
Permit Number: P0111972
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Applicable Compliance Method:

If required, compliance with the annual allowable PE limitation above shall be determined by using the test method(s) and procedures in Methods 1-5 of 40 CFR Part 60, Appendix A. Miscellaneous Requirements

- g) Miscellaneous Requirements
 - (1) None.



2. P901, Sand Operations

Operations, Property and/or Equipment Description:

Sand unloading, storage, mold sand preparation, Silos #1 and #2, Ribbon Blender #1.

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) (PTI 16-922 issued 5/15/1991)	Particulate emissions (PE) shall not exceed 2.0 pounds per hour and 2.55 tons per year. The sand storage silo(s) shall be equipped with a fabric filter to control particulate emissions from the pneumatic conveying of sand from carrier to silo(s).
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-07(B)	Visible particulate emissions from fugitive dust shall not exceed 20 percent opacity as a three-minute average.
d.	OAC rule 3745-17-08(B)	The equipment employed for mold sand preparation and makeup shall be of a design and operated in a manner which minimizes fugitive dust emissions.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-17-11	The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

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

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

- (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 d)(1) above:
- a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
 - b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule; and visible emissions from fugitive dust shall not exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method:

Compliance with the visible particulate emissions limitations shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

b. Emission Limitation:

PE shall not exceed 2.0 pounds hour.

Applicable Compliance Method:

Compliance with the hourly allowable PE limitation above shall be demonstrated by totaling the following products:



i. Mold sand preparation

Multiply the particulate emission factor of 1.3 pounds of particulate emissions per ton of castings produced by the maximum hourly production rate (Ohio EPA RACM, Table 2.7-1).

ii. Mold Making

Multiply the particulate emission factor of 0.04 pound of particulate emissions per ton of castings produced by the maximum hourly production rate (Ohio EPA RACM, Table 2.7-1).

iii. Sand Unloading

Multiply the particulate emission factor of 0.27 pound of particulate emissions per ton sand unloaded (AP-42 Table 11.12-2, 10/86) by the maximum hourly unloading rate. Multiply the uncontrolled emission rate by a fabric filter control factor of 99% (1-.99).

If required, compliance with the hourly allowable PE limitations above shall be determined by using the test method(s) and procedures in Methods 1-5 of 40 CFR Part 60, Appendix A.

c. Emission Limitation:

PE shall not exceed 2.55 tons per year.

Applicable Compliance Method:

Compliance with the annual allowable PE limitation above shall be demonstrated by totaling the following products:

i. Mold sand preparation

Multiply the particulate emission factor of 1.3 pounds of particulate emissions per ton of castings produced (Ohio EPA RACM, Table 2.7-1) by the maximum annual production rate.

ii. Mold Making

Multiply the particulate emission factor of 0.04 pound of particulate emissions per ton of castings produced (Ohio EPA RACM, Table 2.7-1) by the maximum annual production rate.

iii. Sand Unloading

Multiply the particulate emission factor of 0.27 pound of particulate emissions per ton of sand unloaded (AP-42 Table 11.12-2, 10/86) by the maximum capacity of tons of sand unloaded per year and multiply by a fabric filter control factor of 99% (1-.99).



Final Permit-to-Install and Operate
PRECISION ALUMINUM, INC.
Permit Number: P0111972
Facility ID: 1652100075
Effective Date: 12/3/2012

g) Miscellaneous Requirements

(1) None.



3. R001, Spray Booth

Operations, Property and/or Equipment Description:

Mold wash spray booth with fabric filter.

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) (PTI 16-922 issued 5/15/1991)	Organic compound (OC) emissions shall not exceed 47.2 pounds per day. Methanol emissions shall not exceed 21.2 pounds per day. See c)(1) and c)(2) below.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The daily coating usage for this emissions unit shall not exceed 7 gallons.

(2) The daily operating hours for this emissions unit shall not exceed 2 hours.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each day for the spray booth operation:
 - a. the company identification for each coating and cleanup material employed;
 - b. the number of gallons of each coating and cleanup material employed;
 - c. the total number of gallons of all of the coatings and cleanup material employed;
 - d. the organic compound content of each coating and cleanup material, in pounds per gallon;
 - e. the methanol content of each coating and cleanup material, in pounds per gallon;
 - f. the total number of hours the emissions unit was in operation;
 - g. the total organic compound emission rate for all coatings and cleanup materials, in pounds per day; and
 - h. the total methanol emission rate for all coatings and cleanup materials, in pounds per day.

Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements of part d) above:
 - a. an identification of each day during which the total methanol emissions exceeded 21.2 pounds per day, and the actual methanol emissions for each such day; and
 - b. an identification of each day during which the total organic compound emissions exceeded 47.2 pounds per day, and the actual organic compound emissions for each such day.
- (3) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit. The notification shall include a



copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.

- (4) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the coating line operated more than the applicable maximum daily operational limit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

47.2 pounds of OC per day

Applicable Compliance Method:

Compliance with the daily OC emission limitation above shall be demonstrated through the record keeping requirements established in section d)(1) of this permit. USEPA Method 24 shall be used to determine the OC content of each coating and cleanup material. If formulation data supplied by the manufacturer(s) for the coatings employed in this emission unit is determined to be representative or overestimates OC content for all coating samples, based on comparison to method 24 testing, then formulation data may be used in lieu of on-going method 24 analyses. In no case shall formulation data be used which reports lower OC content than method 24 analysis.

b. Emission Limitation:

21.2 pounds of methanol per day

Applicable Compliance Method:

Compliance with the daily methanol emission limitation above shall be demonstrated through the record keeping requirements established in section d)(1) of this permit. USEPA Method 24 shall be used to determine the methanol content of each coating and cleanup material. If formulation data supplied by the manufacturer(s) for the coatings employed in this emission unit is determined to be representative or overestimates methanol content for all coating samples, based on comparison to method 24 testing, then formulation data may be used in lieu of on-going method 24 analyses. In no case shall formulation data be used which reports lower methanol content than method 24 analysis.

g) Miscellaneous Requirements

- (1) None.