

Facility ID: 1667070012 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

[Go to Part II for Emissions Unit F001](#)

[Go to Part II for Emissions Unit P001](#)

[Go to Part II for Emissions Unit P901](#)

\*\*\*THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION\*\*\*

Facility ID: 1667070012 Emissions Unit ID: F001 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

**Part II - Special Terms and Conditions**

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.

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
aluminum casting and pouring of molds	OAC rule 3745-31-05 (PTI 16-1415)	0.67 lb/hr of particulate emissions 0.55 lb/hr of organic compounds
	OAC rule 3745-17-07	See A.2.a below.

2. **Additional Terms and Conditions**
  - (a) Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, from any stack, except as provided by rule.

**B. Operational Restrictions**

1. None

**C. Monitoring and/or Record Keeping Requirements**

1. None

**D. Reporting Requirements**

1. None

**E. Testing Requirements**

1. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:  
 Emission Limitation:  
 0.67 lb/hr of particulate emissions  
 Applicable Compliance Method:  
 Multiply the particulate emissions factor of 4.2 pounds of particulate emissions per ton of metal produced by the maximum hourly rate of metal melted, or use OAC rule 3745-17-03(B)(10).  
 The particulate emission factor was obtained from AP-42, Table 12.10-7, January, 1995.  
 Emission Limitation:  
 0.55 lb/hr of organic compounds  
 Applicable Compliance Method:  
 Emission factors have not been determined for OC emissions from this type of emissions unit, therefore stack testing may be required using method 18, of 40 CFR Part 60, Appendix A, or other methods preapproved by Ohio EPA.  
 Emission Limitation:  
 20% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

**F. Miscellaneous Requirements**

- 1. None

\*\*\*THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION\*\*\*

**Facility ID: 1667070012 Emissions Unit ID: P001 Issuance type: Final State Permit To Operate**

[Go to the top of this document](#)

**Part II - Special Terms and Conditions**

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.

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
natural gas fired burn-out oven	OAC rule 3745-31-05 (PTI 16-1415)	0.16 lb/hr of particulate emissions 0.45 lb/hr of nitrogen oxides 0.99 lb/hr of carbon monoxide 1.20 lbs/hr of sulfur dioxide 0.42 lb/hr of organic compounds
	OAC rule 3745-17-07	See A.2.a below.
	OAC rule 3745-17-09	0.20 pound of particulate emissions per 100 pounds of sand cores charged

- 2. **Additional Terms and Conditions**
  - (a) Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, from any stack, except as provided by rule.

**B. 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 pure bar stock and dry, sawed-off pieces of solid aluminum. Aluminum chips or turnings from machining and/or materials bearing oil, grease, paint, or paper shall not be employed.

**C. Monitoring and/or Record Keeping Requirements**

- 1. None

**D. Reporting Requirements**

- 1. None

**E. Testing Requirements**

- 1. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:  
Emission Limitation:

0.16 lb/hr of particulate emissions

Applicable Compliance Method:

Multiply the particulate emission factor of 4.3 pounds of particulate emissions per ton of metal melted by the maximum hourly rate of metal melted.

For demagging, multiply the particulate emission factor of 1000.0 pounds of particulate emissions per ton of chlorine used by the actual amount of chlorine used hourly. These particulate emission factors were obtained

from AP-42, Table 12.8-2, January, 1995.

The total particulate emission rate is the sum of the melting and demagging values, or use OAC rule 3745-17-03(B)(10).

Emission Limitation:

0.45 lb/hr of nitrogen oxides

Applicable Compliance Method:

Multiply the nitrogen oxides emission factor of 0.15 pound of nitrogen oxides emissions per million Btu by the maximum million Btu per hour.

Emission Limitation:

1.20 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Multiply the sulfur dioxide emission factor of 0.6 pound of sulfur dioxide per million cubic feet of natural gas burned by the maximum consumption rate of the furnace (in million cubic feet per hour).

Emission Limitation:

0.99 lb/hr of carbon monoxide

Applicable Compliance Method:

Multiply the carbon monoxide emission factor of 35.0 pounds of carbon monoxide per million cubic feet of natural gas burned by the maximum consumption rate of the furnace (in million cubic feet per hour).

Emission Limitation:

0.42 tpy of organic compounds

Applicable Compliance Method:

Multiply the organic compounds emission factor of 5.8 pounds of organic compounds per million cubic feet of natural gas burned by the maximum consumption rate of the furnace (in million cubic feet per hour).

Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

**F. Miscellaneous Requirements**

- 1. None

\*\*\*THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION\*\*\*

Facility ID: 1667070012 Emissions Unit ID: P901 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

**Part II - Special Terms and Conditions**

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.

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
natural gas fired reveratory furnace	OAC rule 3745-31-05 (PTI 16-1415)	1.77 lbs/hr of particulate emissions 1.02 lbs/hr of nitrogen oxides 0.03 lb/hr of carbon monoxide 0.01 lb/hr of sulfur dioxide

0.05 lb/hr of organic compounds

OAC rule 3745-17-07

See A.2.a below.

OAC rule 3745-17-11

See A.2.b below.

2. **Additional Terms and Conditions**

- (a) Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, from any stack, except as provided by rule.  
The particulate emissions limitation required by OAC rule 3745-17-11 is less stringent than the particulate emissions limitation established by best available technology under OAC rule 3745-31-05.

B. **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 pure bar stock and dry, sawed-off pieces of solid aluminum. Aluminum chips or turnings from machining and/or materials bearing oil, grease, paint, or paper shall not be employed.

C. **Monitoring and/or Record Keeping Requirements**

- 1. None

D. **Reporting Requirements**

- 1. None

E. **Testing Requirements**

- 1. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:  
Emission Limitation:

1.77 lbs/hr of particulate emissions

Applicable Compliance Method:

Multiply the particulate emission factor of 4.3 pounds of particulate emissions per ton of metal melted by the maximum hourly rate of metal melted.

For demagging, multiply the particulate emission factor of 1000.0 pounds of particulate emissions per ton of chlorine used by the actual amount of chlorine used hourly. These particulate emission factors were obtained from AP-42, Table 12.8-2, January, 1995.

The total particulate emission rate is the sum of the melting and demagging values, or use OAC rule 3745-17-03(B)(10).

Emission Limitation:

1.02 lbs/hr of nitrogen oxides

Applicable Compliance Method:

Multiply the nitrogen oxides emission factor of 0.15 pound of nitrogen oxides emissions per million Btu by the maximum million Btu per hour.

Emission Limitation:

0.01 lb/hr of sulfur dioxide

Applicable Compliance Method:

Multiply the sulfur dioxide emission factor of 0.6 pound of sulfur dioxide per million cubic feet of natural gas burned by the maximum consumption rate of the furnace (in million cubic feet per hour).

Emission Limitation:

0.03 lb/hr of carbon monoxide

Applicable Compliance Method:

Multiply the carbon monoxide emission factor of 35.0 pounds of carbon monoxide per million cubic feet of natural gas burned by the maximum consumption rate of the furnace (in million cubic feet per hour).

Emission Limitation:

0.05 tpy of organic compounds

Applicable Compliance Method:

Multiply the organic compounds emission factor of 5.8 pounds of organic compounds per million cubic feet of natural gas burned by the maximum consumption rate of the furnace (in million cubic feet per hour).

Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

F. **Miscellaneous Requirements**

1. None