

Facility ID: 0514010139 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.

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

Facility ID: 0514010139 Emissions Unit ID: P017 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>
(P017) - 6000 lbs/hr natural gas fired aluminum melt furnace	OAC rule 3745-31-05(C) and PTI 05-14381	1.35 lb particulate emissions (PE)/hr; 5.91 tons PE/year Emissions from natural gas usage from combustion shall not exceed the following: 0.09 lb PE/hr 0.4 ton PE/yr 0.01 lb SO2/hr 0.04 tons SO2/yr 1.2 lb NOx/hr 5.26 tons NOx/yr 0.07 lb VOC/hr 0.31 tons VOC/yr 1.01 lb CO/hr 4.42 tons CO/yr Visible emissions of fugitive dust from building openings shall not exceed 5 percent opacity as a 3-minute average, except as provided by rule. The maximum potential of this emissions unit is less than the emission limitation of this rule.
	OAC rule 3745-17-11(B)	

2. **Additional Terms and Conditions**
 - (a) The emissions limitation of 1.35 lb/hr and 5.91 TPY of particulate emissions are based upon potential-to-emit for this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.

B. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

C. Monitoring and/or Record Keeping Requirements

1. 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.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

E. Testing Requirements

1. Compliance with the emissions limitations of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitation:

1.35 pounds particulate emissions per hour

Applicable Compliance Method:

Compliance shall be determined by the following equation:

$$PE = Ef \times TP$$

Where:

PE = Particulate emission in lbs/hr

Ef = Emission factor 0.45 lb PE/ton of aluminum melted (Based upon June 11-12, 1996 emissions test)

TP = Maximum tons of aluminum melted per hour (max. = 6,000 lbs/hr)

Emission Limitation:

5.91 tons particulate emissions per year

Applicable Compliance Method:

Compliance shall be determined by the following equation:

$$PE = (Ef \times TP \times 8,760 \text{ hrs/year}) / (2,000 \text{ lbs/ton})$$

Where:

PE = Particulate emission in lbs/hr

Ef = Emission factor 0.45 lb PE/ton of aluminum melted (Based upon June 11-12, 1996 emissions test)

TP = Maximum tons of aluminum melted per hour (max. = 6,000 lbs/hr)

2. Emissions from natural gas usage shall not exceed the following:

0.09 lb PE/hr
 0.4 ton PE/yr
 0.01 lb SO₂/hr
 0.04 ton SO₂/yr
 1.2 lb NO_x/hr
 5.26 tons NO_x/yr
 0.07 lb VOC/hr
 0.31 ton VOC/yr
 1.01 lb CO/hr
 4.42 tons CO/yr

Applicable Compliance Method:

These limits represent the maximum capacity of the aluminum melting furnace. These emission limitations were determined by multiplying the maximum natural gas usage (12,000 ft³/hr) by the emission factors for each pollutant (lbs. of pollutant/MM ft³) found in "Compilation of Air Pollutant Emission Factors", the 7/98 edition of AP-42, Tables 1.4-1, and 1.4-2. These amounts were multiplied by 8,760 hours per year and divided by 2,000 pounds per ton to document the annual potential emissions for the furnace. Since these limits reflect the potential emissions, no additional compliance determination is required.

3. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements to assure compliance with the allowable hourly particulate emission rate:
 The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of the emissions unit.
 The emission testing shall be conducted to demonstrate compliance with the 1.35 lbs of particulate emissions (PE) per hour.
 The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Pollutant Test Method Location
 Particulates Method 5 40 CFR Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time (s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

F. Miscellaneous Requirements

1. None