

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: P018 Issuance type: Final State Permit To Operate

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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>
(P018) - 1500 lbs/hr natural gas fired aluminum melt furnace	OAC rule 3745-31-05(C)	0.34 lb particulate emissions (PE)/hr; 1.49 tons PE/year Emissions from natural gas usage from combustion shall not exceed the following: 0.02 lb PE/hr 0.09 ton PE/yr 0.002 lb SO2/hr 0.009 tons SO2/yr 0.3 lb NOx/hr 1.31 tons NOx/yr 0.02 lb VOC/hr 0.09 tons VOC/yr 0.25 lb CO/hr 1.10 tons CO/yr
	OAC rule 3745-17-11(B)	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.

2. **Additional Terms and Conditions**
 - (a) The emissions limitation of 0.34 lb/hr and 1.49 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:
0.34 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. = 1,500 lbs/hr)

Emission Limitation:

1.49 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. = 1,500 lbs/hr)

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

0.02 lb PE/hr
 0.09 ton PE/yr
 0.002 lb SO₂/hr
 0.009 ton SO₂/yr
 0.3 lb NO_x/hr
 1.31 tons NO_x/yr
 0.02 lb VOC/hr
 0.09 ton VOC/yr
 0.25 lb CO/hr
 1.10 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 (3,000 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.

F. Miscellaneous Requirements

1. None