

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install **15-1341** for **Albex Aluminum, Inc.** located in **STARK** County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

P007

on

Description
 12 MMBtu/hr Natural
 Gas Fired Aluminum
 Smelting and Holding
 Reverberatory Furnace

BAT
 Determination

Clean Scrap
 Only

Federal &
 OAC Rules

OAC3745-17-
 07(A)(1)
 (1/31/98)

OAC 3745-17-11
 (1/31/98)

OAC 3745-31-05
 (4-27-98)

Control/Usage
 Requirements

BAT is more
 restrictive

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PM/PM₁₀:
 2 pounds/hr;
 8.76 tons/yr

nitrogen oxides:
 1.68 pounds/hour;
 7.36 tons/year

carbon monoxide:
 0.42 pound/hour;
 1.84 tons/year

organic compounds:
 0.07 pound/hour;
 0.31 ton/year

There shall be no
 visible particulate
 emissions with an
 opacity in excess of
 10% for a 3-minute
 average

Source

Identifi-
 ficati

Applicable

Permit
 Allowable
 Mass Emissions
 and/or

SUMMARY (See Note)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	<u>Tons/Year</u>
PM/PM ₁₀	8.76
NO _x	7.36
CO	1.84
OC	0.31

Note: The information contained under the Summary of Emissions section of the Permit to Install is for informational purposes only and is not enforceable.

ADDITIONAL SPECIAL TERMS & CONDITIONS

Emissions Unit P007 - Furnace

A. Operational Restrictions

1. This furnace shall melt no more than 6,000 pounds/hr of aluminum as a 24-hour average.
Note: This furnace shall also be used as a holding furnace for molten aluminum melted in the two electric induction furnaces.
2. Only clean scrap shall be melted in this furnace. Aluminum contaminated with rubber, plastic, paper, rags, oil, grease, or similar smoke-producing material shall not be charged to this furnace. Prior to startup, the permittee shall submit a Scrap Management Plan (SMP) to the Canton Local Air Agency for review and approval. The SMP shall be implemented immediately after approval by the Canton LAA. The main focus of the SMP shall be to ensure that only clean scrap is melted in this furnace.
3. There shall be no visible emissions from either stack servicing this emissions unit that has an opacity of more than 10% as a 3-minute average.
4. Natural gas shall be the only fuel burned in this emissions unit.

B. Monitoring and/or Recordkeeping Requirements

1. The permittee shall keep a daily record of the following information:
 - a. The total amount of aluminum melted in this furnace.
 - b. The total number of hours this furnace operated.
 - c. The average hourly aluminum melting rate, (a)/(b), in pounds-per-hour average.
2. The permittee shall perform daily checks, when the emissions unit is being charged with scrap aluminum and when the weather conditions allow, for any visible particulate emissions from either of the two stacks

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 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 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.

C. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports of the following:
 - a. Identify any exceedances of the limit of 6,000 pounds of aluminum melted per hour.
 - b. Identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and describe any corrective actions taken to eliminate the visible particulate emissions.
2. The permittee shall submit reports in the following manner:
 - a. Reports shall be submitted to the Canton City Health Department; Air Pollution Control Division; 420 Market Avenue N.; Canton, OH 44702.
 - b. Quarterly written reports of any deviation from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the monitoring and recordkeeping requirements specified in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be promptly made to the Canton Local Air Agency. If no deviations occurred during the calendar quarter, a quarterly report shall be submitted which states that no deviations occurred during that quarter. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (Any malfunctions must be reported in accordance with the procedures specified in OAC rule 3745-15-06.)

D. Compliance Methods and Testing Requirements

1. Compliance with the emission limitation(s) of this permit shall be determined in accordance with the following method(s):

a. Emission Limitation

2 pounds/hour of PM/PM₁₀

Applicable Compliance Method

Compliance shall be demonstrated using Method 5, 40 CFR Part 60, Appendix A. If this emissions unit can operate without visible emissions compliance should be assured.

b. Emission Limitation

1.68 pounds NO_x/hour

Applicable Compliance Method

The burner size is 12 MMBtu/hr. This burner is capable of burning up to 12,000 CF of natural gas per hour. Multiplying the AP-42 emission factor of 140 lbs NO_x/10⁶cf times 12,000 cf/hr equals 1.68 lbs/hr.

c. Emission Limitation

0.42 pound CO/hour

Applicable Compliance Method

The burner size is 12 MMBtu/hr which burns up to 12,000 CF of natural gas per hour. Multiplying the AP-42 emission factor of 35 lbs CO/10⁶cf times 12,000 cf/hr equals 0.42 lb/hr.

d. Emission Limitation

0.07 pound OC/hour

Applicable Compliance Method

The burner size is 12 MMBtu/hr which burns up to 12,000 CF of natural gas per hour. Multiplying the AP-42 emission factor of 5.8 lbs CO/10⁶cf times 12,000 cf/hr equals 0.07 lb/hr.

e. Emission Limitation

No visible particulate emissions in excess of 10% for a 3-minute average.

Applicable Compliance Method

Method 9, 40 CFR Part 60 Appendix A

f. Emission Limitation

8.76 tons PM-PM₁₀/year
7.36 tons NO_x/year
1.84 tons CO/year
0.31 ton OC/year

Applicable Compliance Method

Multiply the hourly emission limit times 8,760 hours/year.

E. Miscellaneous Requirements:

None

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