



State of Ohio Environmental Protection Agency

STREET ADDRESS:

1800 WaterMark Drive
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049

Re: Permit to Install
Stark County
Application No: 15-1301

CERTIFIED MAIL

October 22, 1997

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KAISER ALUMINUM & CHEMICAL
MICHAEL L. BALOGH
4125 MAHONING ROAD, N.E.
CANTON, OH 44705

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions I urge you to read it carefully.

The Ohio EPA is urging 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 Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,


Thomas G. Rigo, Manager
Field Operations & Permit Section
Division of Air Pollution Control

cc: US EPA
CANTON AIR POLLUTION CONTROL

George V. Voinovich, Governor
Nancy P. Hollister, Lt. Governor
Donald R. Schregardus, Director



Permit to Install Terms and Conditions

Application No. 15-1301
APS Premise No. 1576000335
Permit Fee: \$2000.00

Name of Facility: KAISER ALUMINUM & CHEMICAL

Person to Contact: MICHAEL L. BALOGH

Address: 4125 MAHONING ROAD, N.E.
CANTON, OH 44705

Location of proposed source(s): 4125 MAHONING ROAD, N.E.
PLAIN TOWNSHIP, OHIO

Description of proposed source(s):
THREE ALUMINUM MELTING FURNACES.

Date of Issuance: October 22, 1997

Effective Date: October 22, 1997

The above named entity is hereby granted a permit to install for the above described source(s) 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 above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described source(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons)

may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

PUBLIC DISCLOSURE

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

BEST AVAILABLE TECHNOLOGY

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws and regulations.

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for KAISER ALUMINUM & CHEMICAL 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.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
P040	5 MMBtu/hour natural gas fired 1 ton/hour aluminum melting furnace; HiTEQ furnace number 10	Compliance with 3745-17-11 and with terms and conditions of this permit	3745-17-11 including but not limited to 3745-17-11(B) (2)	Permittee has accepted a more restrictive limit (see below)
			3745-17-07 including but not limited to 3745-17-07(A) (1)	Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except for a period of 6 consecutive minutes in any 60-minute period. Visible particulate emissions shall not exceed 60 percent, as a six-minute average, at any time.
			3745-31-05	3.88 lbs PM/hr 1.20 tons PM/yr 13.44 lbs NO _x /day 2.44 tons NO _x /yr
P041	6.16 MMBtu/hour natural gas fired 2.25 tons/hour aluminum	Compliance with 3745-17-11 and with terms and conditions	3745-17-11 including but not limited to 3745-17-11(B) (2)	Permittee has accepted a more restrictive limit (see below)

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
	melting furnace; HiTEQ furnace number 11	of this permit	3745-17-07 including but not limited to 3745-17-07(A) (1)	Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except for a period of 6 consecutive minutes in any 60-minute period. Visible particulate emissions shall not exceed 60 percent, as a six-minute average, at any time.
			3745-31-05	3.34 lbs PM/hr 0.89 ton PM/yr 18.24 lbs NO _x /day 3.2 tons NO _x /yr
P042	2.05 MMBtu/hour natural gas fired .25 ton/hour aluminum melting furnace; Schaefer furnace number 4A	Compliance with 3745-17-11 and with terms and conditions of this permit	3745-17-11 including but not limited to 3745-17-11(B) (2) 3745-17-07 including but not limited to 3745-17-07(A) (1)	Permittee has accepted a more restrictive limit (see below) Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except for a period of 6 consecutive minutes in any 60-minute period. Visible particulate emissions shall not exceed 60 percent, as a six-minute average,

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
				at any time
			3745-31-05	1.69 lbs PM/hr 0.62 ton PM/yr 5.52 lbs NO _x /day 1 ton NO _x /yr

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
NO _x	6.64
PM	2.71

RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than three years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to Canton Air Pollution Control, 420 Market Ave. N. , City Hall, Canton, Ohio 44702-1544.

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the Canton Air Pollution Control, 420 Market Ave. N. , City Hall, Canton, Ohio 44702-1544.

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

P040

A. Operational Restrictions

1. The majority of the particulate emissions is generated by the fluxing operation. Therefore, in order to limit particulate emissions, no more than one fluxing shall take place in any one hour and no more than 384 fluxings shall take place in any one calendar year.
2. The only fuel to be burned in this emissions unit shall be natural gas.

B. Monitoring and/or Recordkeeping Requirements

The permittee shall collect and record the following information each day for the furnace:

1. the number of fluxings conducted;
2. the pounds of aluminum melted;
3. the number of hours the furnace operated; and,
4. for each day the average hourly number of fluxings, in fluxings per hour (average).

C. Reporting Requirements

The permittee shall submit deviation (excursion) reports which include the following information:

1. an identification of each day during which the average hourly number of fluxings exceeded one and the actual hourly rate of fluxings on each such day; and,
2. an identification of all exceedances of the 384 fluxings per year limit and the actual number of fluxings for each such year.

The reports shall be sent to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue N., Canton, Ohio 44702, within 45 days after the exceedance occurs.

D. Compliance Methods and Testing Requirements

1. Emission Limit

3.88 pounds PM/hour

Compliance Method

Based on internal testing, 3.77 pounds of particulate emissions are generated by each fluxing operation. Other than fluxing, this furnace will emit .11 pound PM/hour. By limiting the number of fluxings to one per hour, this limit shall not be exceeded.

2. Emission Limit

1.20 tons PM/year

Compliance Method

Based on internal testing, 3.77 pounds of particulate emissions are generated by each fluxing operation. Other than fluxing, this furnace will emit .11 pound PM/hour. By limiting the number of fluxings to 384 per year, this limit shall not be exceeded.

3. Emission Limit

13.44 pounds NO_x/day

Compliance Method

Based on internal testing, 0.07 pound NO_x/hour is generated by the smelting operation. Based on AARS, 0.49 pound NO_x/hour is generated by the burning of natural gas.

4. Emission Limit

2.44 tons NO_x/year

Compliance Method

Based on internal testing, 0.07 pound NO_x/hour is generated by the smelting operation. Based on AARS, 0.49 pound NO_x/hour is generated by the burning of natural gas.

5. Emission Limit

Opacity limit

Compliance Method

Method 9

E. Miscellaneous Requirements

None.

P041

A. Operational Restrictions

1. The majority of the particulate emissions is generated by the fluxing operation. Therefore, in order to limit particulate emissions, no more than one fluxing shall take place in any one hour and no more than 384 fluxings shall take place in any one calendar year.
2. The only fuel to be burned in this emissions unit shall be natural gas.

B. Monitoring and/or Recordkeeping Requirements

The permittee shall collect and record the following information each day for the furnace:

1. the number of fluxings conducted;
2. the pounds of aluminum melted;
3. the number of hours the furnace operated; and,
4. for each day the average hourly number of fluxings, in fluxings per hour (average).

C. Reporting Requirements

The permittee shall submit deviation (excursion) reports which include the following information:

1. an identification of each day during which the average hourly number of fluxings exceeded one and the actual hourly rate of fluxings on each such day; and,

2. an identification of all exceedances of the 384 fluxings per year limit and the actual number of fluxings for each such year.

The reports shall be sent to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue N., Canton, Ohio 44702, within 45 days after the exceedance occurs.

D. Compliance Methods and Testing Requirements

1. Emission Limit

3.34 pounds PM/hour

Compliance Method

Based on internal testing, 3.28 pounds of particulate emissions are generated by each fluxing operation. Other than fluxing, this furnace will emit 0.06 pound PM/hour. By limiting the number of fluxings to one per hour, this limit shall not be exceeded.

2. Emission Limit

0.89 ton PM/year

Compliance Method

Based on internal testing, 3.28 pounds of particulate emissions are generated by each fluxing operation. Other than fluxing, this furnace will emit 0.06 pound PM/hour. By limiting the number of fluxings to 384 per year, this limit shall not be exceeded.

3. Emission Limit

18.24 pounds NO_x/day

Compliance Method

Based on internal testing, 0.16 pound NO_x/hour is generated by the smelting operation. Based on AIRS, 0.6 pound NO_x/hour is generated by the burning of natural gas.

4. Emission Limit

3.2 tons NO_x/year

Compliance Method

Based on internal testing, 0.16 pound NO_x/hour is generated by the smelting operation. Based on AIRS, 0.6 pound NO_x/hour is generated by the burning of natural gas.

5. Emission Limit

Opacity limit

Compliance Method

Method 9

E. Miscellaneous Requirements

None.

P042

A. Operational Restrictions

1. The majority of the particulate emissions is generated by the fluxing operation. Therefore, in order to limit particulate emissions, no more than one fluxing shall take place in any one hour and no more than 384 fluxings shall take place in any one calendar year.
2. The only fuel to be burned in this emissions unit shall be natural gas.

B. Monitoring and/or Recordkeeping Requirements

The permittee shall collect and record the following information each day for the furnace:

1. the number of fluxings conducted;
2. the pounds of aluminum melted;
3. the number of hours the furnace operated; and,
4. for each day the average hourly number of fluxings, in fluxings per hour (average).

C. Reporting Requirements

The permittee shall submit deviation (excursion) reports which include the following information:

1. an identification of each day during which the average hourly number of fluxings exceeded one and the actual hourly rate of fluxings on each such day; and,
2. an identification of all exceedances of the 384 fluxings per year limit and the actual number of fluxings for each such year.

The reports shall be sent to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue N., Canton, Ohio 44702, within 45 days after the exceedance occurs.

D. Compliance Methods and Testing Requirements

1. Emission Limit

1.69 pounds PM/hour

Compliance Method

Based on internal testing, 1.61 pounds of particulate emissions are generated by each fluxing operation. Other than fluxing, this furnace will emit 0.08 pound PM/hour. By limiting the number of fluxings to one per hour, this limit shall not be exceeded.

2. Emission Limit

0.62 ton PM/year

Compliance Method

Based on internal testing, 1.61 pounds of particulate emissions are generated by each fluxing operation. Other than fluxing, this furnace will emit .11 pound PM/hour. By limiting the number of fluxings to 384 per year, this limit shall not be exceeded.

3. Emission Limit

5.52 pounds NO_x/day

Compliance Method

Based on internal testing, 0.03 pound NO_x/hour is generated by the smelting operation. Based on AIRS, 0.2 pound NO_x/hour is generated by the burning of natural gas.

4. Emission Limit

1 ton NO_x/year

Compliance Method

Based on internal testing, 0.03 pound NO_x/hour is generated by the smelting operation. Based on AIRS, 0.2 pound NO_x/hour is generated by the burning of natural gas.

5. Emission Limit

Opacity limit

Compliance Method

Method 9

E. Miscellaneous Requirements

None.