John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

8/7/2014

Certified Mail

No	TOXIC REVIEW
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
Yes	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
Yes	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dimetra Mason
Matalco Inc
850 Intermodal Drive
Brampton, ON L6T-0B5

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0278112008
Permit Number: P0116543
Permit Type: Initial Installation
County: Trumbull

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to “Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General’s Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging 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 Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-NEDO

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
Matalco Inc

Facility ID:	0278112008
Permit Number:	P0116543
Permit Type:	Initial Installation
Issued:	8/7/2014
Effective:	8/7/2014
Expiration:	8/7/2019

Division of Air Pollution Control
Permit-to-Install and Operate
for
Matalco Inc

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Authorization

Facility ID:	0278112008
Application Number(s):	A0050352
Permit Number:	P0116543
Permit Description:	Installation of emissions units associated with a secondary aluminum production facility.
Permit Type:	Initial Installation
Permit Fee:	$3,750.00
Issue Date:	8/7/2014
Effective Date:	8/7/2014
Expiration Date:	8/7/2019

Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

MatalcoInc
5120 Tod Ave SW
Lordstown, OH 44481

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)425-9171

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s))listed in this section 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 described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

Authorization (continued)

Permit Number: P0116543
Permit Description: Installation of emissions units associated with a secondary aluminum production facility.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	**P901**
Company Equipment ID:	MF #1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P902**
Company Equipment ID:	MF#2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P903**
Company Equipment ID:	TCD #1 Thermal Chip Dryer
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P904**
Company Equipment ID:	RF# 1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee.This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee.Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. “Shut down” means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as beingpermanently shut down without first applying for and obtaining a permit pursuantto OAC Chapter 3745-31.

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. 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).

   a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

      (1) None.

   b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

      (1) B.2.b)(1) through B.2.b)(10).

2. Applicable Emissions Limitations and/or Control Requirements

   a) Facility-wide emissions, including permit to install and operate, exempt, and "de minimis" emissions units, shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
(1)	OAC rule 3745-31-05(D) (Synthetic Minor to Avoid Title V, PSD and MACT)	See B.2.b)(1) through B.2.b)(10).

   b) Additional Terms and Conditions

      (1) Facility-wide emissions of particulate matter less than 10 microns in diameter (PM_{10}) shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation of monthly emissions.

      (2) Particulate emissions (PE) from the emissions units that vent to a baghouse shall not exceed 0.01 grain per dry standard cubic foot (grain/dscf).

      (3) Facility-wide emissions of nitrogen oxides (NO_x) shall not exceed 99.3 tons per year, based upon a rolling, 12-month summation of monthly emissions.

      (4) Facility-wide emissions of greenhouse gas (GHG, CO_2e) shall not exceed 99,905 tons per year, based upon a rolling, 12-month summation of monthly emissions.

      (5) Facility-wide emissions of hydrochloric acid (HCl) shall not exceed 0.5 ton per year, based upon a rolling, 12-month summation of monthly emissions.

      (6) Facility-wide maximum annual natural gas throughput shall not exceed 1,655.0 MMCF, as a rolling, 12-month summation.

      (7) The use of a baghouse to control PM_{10} and HCl for emissions units P901 and P904 as specified in sections C.1.c)(1) and C.1.c)(2) and C.4.c)(1) and C.4.c)(2).

(8) Facility-wide volatile organic compounds (VOC) emissions shall not exceed 30.7 tons per year, based upon a rolling, 12-month summation of monthly emissions.

(9) Facility-wide sulfur dioxide (SO_2) emissions shall not exceed 22.1 tons per year, based upon a rolling, 12-month summation of monthly emissions.

(10) Facility-wide carbon monoxide (CO) emissions shall not exceed 52.1 tons per year, based upon a rolling, 12-month summation of monthly emissions.

3. Operational Restrictions

a) To ensure enforceability during the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the following emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of PM_{10} Facility-wide (tons)	Maximum Allowable Cumulative Emissions of NO_xFacility-wide (tons)	Maximum Allowable Cumulative Emissions of GHG Facility-wide (tons)	Maximum Allowable Cumulative Emissions of HCl Facility-wide (tons)
1	1.0	9.0	9,000.0	0.05
1-2	2.0	18.0	18,000.0	0.10
1-3	3.0	27.0	27,000.0	0.15
1-4	4.0	36.0	36,000.0	0.20
1-5	5.0	45.0	45,000.0	0.25
1-6	6.0	54.0	54,000.0	0.30
1-7	7.0	63.0	63,000.0	0.35
1-8	8.0	72.0	72,000.0	0.40
1-9	9.0	81.0	81,000.0	0.45
1-10	9.9	90.0	90,000.0	0.50
1-11	9.9	99.3	99,905.0	0.50
1-12	9.9	99.3	99,905.0	0.50

After the first 12 calendar months of following the issuance of this permit, compliance with the annual emission limitations for PM_{10}, NO_x, GHG and HCl shall be based upon a rolling, 12-month summation of the emissions of PM_{10}, NO_x, GHG and HCl.

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

4. Monitoring and/or Recordkeeping Requirements

a) The permittee shall maintain records demonstrating compliance with section B.2. of this permit.

(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.

(2) The permittee shall record the following information each month from all facility emissions units, including permit-to-install and operate, exempt, and "de minimis" emissions units:

(a) the total natural gas usage, in MMCF;

(b) the rolling, 12-month summation of the monthly natural gas usage, in MMCF;

(c) the total process throughput of aluminum, in tons; and

(d) the rolling, 12-month summation of the total process throughput of aluminum, in tons.

(3) The permittee shall record the following information each month from all facility emissions units, including permit-to-install and operate, exempt, and "de minimis" emissions units:

a) the total PM_{10} emissions, in tons [Natural gas combustion: B.4.a)(2) X AP-42 emission factor, Chapter 1.4 / 2000 lbs/ton] + [Process throughput applicable for P901, P902, P903, and P904: B.4.a)(2) X emission factor from most recent stack test / 2000 lbs/ton];

b) the rolling, 12 month summation of PM_{10} emissions, in tons;

c) the total NO_x emissions, in tons [Natural gas combustion: B.4.a)(2) X AP-42 emission factor, Chapter 1.4 / 2000 lbs/ton] + [Process throughput applicable for P901, P902, P903, and P904: B.4.a)(2) X emission factor from most recent stack test / 2000 lbs/ton];

d) the rolling, 12-month summation of NO_x emissions, in tons;

e) the total VOC emissions, in tons [Natural gas combustion: B.4.a)(2) X AP-42 emission factor, Chapter 1.4 / 2000 lbs/ton] + [Process throughput applicable for P901, P902, P903, and P904: B.4.a)(2) X emission factor from most recent stack test / 2000 lbs/ton];

f) the rolling, 12-month summation of VOC emissions, in tons;

g) the total SO_2 emissions, in tons [Natural gas combustion emissions are negligible at 0.5 tpy: + [Process throughput applicable for P903: B.4.a)(2) X emission factor of 2.9 lb/ton (manufacturer)t FEPTIO / 2000 lbs/ton];

h) the rolling, 12-month summation of SO_2 emissions, in tons;

i) the total CO emissions, in tons [Natural gas combustion: B.4.a)(2) X AP-42 emission factor, Chapter 1.4 / 2000 lbs/ton];

j) the rolling, 12-month summation of CO emissions, in tons;

k) the total greenhouse gas (CO_2e)* emissions, in tons [CO_2e tpy = CO_2tpy X CO_2 GWP (1) + CH_4tpy X CH_4 GWP (21) + N_2O tpy X N_2O GWP (310)]

Natural gas combustion: B.4.a)(2) X AP-42 emission factor, Chapter 1.4 / 2000 lbs/ton]

*Greenhouse Warming Potentials (GWP based upon Table A-1 of 40 CFR Part 98, Subpart A, CO_2e = CO_2 equivalents;

l) the rolling, 12 month summation of greenhouse gas (CO_2e) emissions, in tons;

m) the HCl emissions, in tons [Process throughput applicable for P901: B.4.a)(2) X emission factor from most recent stack test / 2000 lbs/ton]; and

n) the rolling, 12 month summation of the HCl emissions, in tons.

5. The permittee shall submit quarterly deviation reports that identify:

a) all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the PTE of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

(1) the maximum, rolling 12-month annual natural gas throughput limitation of 1,655.0 MMCF;

(2) any time when each of the baghouses associated with emissions units P901 and P904 was not operating when the emissions unit was in operation;

(3) the rolling, 12-month PM_{10} emission limitation of 9.9 tons;

(4) the rolling, 12-month NO_x emission limitation of 99.3 tons;

(5) the rolling, 12-month VOC emission limitation of 30.7 tons;

(6) the rolling, 12-month SO2 emission limitation of 22.1 tons;

(7) the rolling, 12-month CO emission limitation of 52.1 tons;

(8) the rolling, 12-month GHG (CO_2e) emission limitation of 99,905 tons;

(9) the rolling, 12-month HCl emission limitation of 0.5 ton;

(10) the probable cause of each deviation (excursion);

(11) any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

(12) the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by Ohio EPA's Northeast District Office.

Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

6. Testing Requirements

a) Compliance with the Emissions Limitations and/or Control Requirements specified in sections B.2.a) and B.2.b) of these terms and conditions shall be determined in accordance with the following methods:

(1) Emission Limitation:

Facility-wide emissions of PM_{10} shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation of monthly emissions.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in B.4.a)(3)a).

(2) Emission Limitation:

Facility-wide emissions of NO_x shall not exceed 99.3 tons per year, based upon a rolling, 12-month summation of monthly emissions.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in B.4.a)(3)c).

(3) Emission Limitation:

Facility-wide emissions of GHG, CO_2e shall not exceed 99,905 tons per year, based upon a rolling, 12-month summation of monthly emissions.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in B.4.a)(3)k).

(4) Emission Limitation:

Facility-wide emissions of HCl shall not exceed 0.5 ton per year, based upon a rolling, 12-month summation of monthly emissions.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in B.4.a)(3)m).

(5) Emission Limitation:

Facility-wide emissions of VOC shall not exceed 30.7 tons per year, based upon a rolling, 12-month summation of monthly emissions.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in B.4.a)(3)e).

(6) Emission Limitation:

Facility-wide emissions of SO_2 shall not exceed 22.1 tons per year, based upon a rolling, 12-month summation of monthly emissions.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in B.4.a)(3)g).

(7) Emission Limitation:

Facility-wide emissions of CO shall not exceed 52.1 tons per year, based upon a rolling, 12-month summation of monthly emissions.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in B.4.a)(3)i).

7. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart RRR: P901, P902, P903 and P904. The complete MACT requirements, including General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the appropriate Ohio EPA District Office or local air agency.

C. Emissions Unit Terms and Conditions

1. P901, Melting Furnace #1

Operations, Property and/or Equipment Description:

Secondary Aluminum Group 1 Tilting Melting Furnace, natural gas-fired with 52 mmBtu/hr heat input capacity and 19.0 TPH maximum melting capacity, equipped with a sodium bicarbonate injected baghouse, processing both clean and dirty scrap.

a) 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. b)(1)d.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	The emission limitations established pursuant to this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(D) for particulate emissions (PE), hydrochloric acid (HCl) emissions and the emission limitations provided in 40 CFR Part 63, Subpart RRR. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/2006	See b)(2)b.
c.	ORC 3704.03(T)	The emission limitations established pursuant to this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(D) for nitrogen oxides (NO_x), greenhouse gases (GHG),

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		volatile organic compounds (VOC), sulfur dioxide (SO_2), and carbon monoxide (CO).
d.	OAC rule 3745-31-05(D)	See B.2.a)(1) and b)(2)e.
e.	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
f.	OAC rule 3745-17-07(B)	See b)(2)c.
g.	OAC rule 3745-17-08(B)	See b)(2)d.
h.	OAC rule 3745-17-11	PE shall not exceed 29.5 pounds per hour (Table I).
i.	40 CFR Part 63, Subpart RRR	Dioxins and Furans (D/F) emissions shall not exceed 2.1E-04 grain D/F TEQ per ton of feed or charge. See b)(2)f through b)(2)l. See c)(1) and c)(2).

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC Rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP) Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply: b)(1)f and b)(2)b.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE emissions from this emissions unit since the "controlled" potential to emit is less than ten tons per year.

c. In accordance with OAC rule 3745-17-07(B)(11)d, OAC rule 3745-17-07(B)(1) shall not apply to any fugitive emissions unit which is exempted from the requirements of OAC rule 3745-17-08(B).

d. The facility is not located at an Appendix A area of OAC rule 3745-17-08. In accordance with OAC rule 3745-17-08 (A)(1), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

e. The emissions from this emissions unit shall be vented to a baghouse at all times the emissions unit is in operation.

f. Section 63.1503 of 40 CFR Part 63, Subpart RRR defines TEQ as the international method of expressing toxicity equivalents for dioxins and furans as defined in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and - Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016).

g. The permittee must provide and maintain easily visible labels posted at this emissions unit that identifies the applicable emission limits and means of compliance, including the type of emissions unit (e.g. group 1 furnace) and the applicable operational standards and control methods (work practice or control device). This includes, but is not limited to, the type of charge to be used (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the Operation, Maintenance and Monitoring (OM&M) Plan.

h. The permittee shall employ a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice." The permittee has conducted an evaluation of the capture and collection system for this furnace and modified the system accordingly.

i. For the bag leak detection system, the permittee shall initiate corrective action within 1 hour of a bag leak detection system alarm. The fabric filter system shall be operated such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period.

   In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time shall be counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the permittee takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the permittee to initiate corrective action.

j. This emissions unit shall be operated in accordance with the most current OM&M Plan and most current Startup, Shutdown and Malfunction Plan (SSMP).

k. When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the most recent performance test and incorporated in the OM&M Plan, the owner or operator must initiate corrective action. Corrective actions must restore operation of the affected source or emissions unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance

with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the most recent performance test and steps to prevent the likely recurrence of the cause of a deviation.

l. The permittee shall use sodium bicarbonate in the baghouse serving this emissions unit at the rate set during the initial and/or most recent performance test which demonstrates compliance with all emission limitations, and which demonstrates that the HCl emissions from the facility are less than 0.5 ton per year.

c) Operational Restrictions

(1) The permittee shall maintain the 3-hour block average inlet temperature for the fabric filter at or below the average temperature established during the most recent performance test which demonstrated compliance with the applicable emission limitations, plus 25 degrees Fahrenheit.

(2) For the sodium bicarbonate injection system, the permittee shall maintain free-flowing sodium bicarbonate in the hopper to the feed device at all times and maintain the sodium bicarbonate feeder setting at the same level established during the most recent performance testing which demonstrated compliance with the applicable emission limitations.

(3) The values for the parameters required in c)(1) and c)(2) above, that are established during the initial and/or most recent performance test which demonstrates compliance with the applicable emission limitations, shall be included as revisions to the OM&M Plan.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) 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 also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(2) The permittee shall properly operate and maintain equipment to continuously monitor and record the pressure drop across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee currently monitors and records the pressure drop continuously via the Programmable Logic Controller (PLC).

(3) Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The pressure drop shall be maintained within the manufacturer's recommended range and/or the range established in the most recent passing compliance test.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(4) The permittee shall collect and record the following information for each day for the control equipment:

a. a log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

(5) The permittee must inspect the labels for this emissions unit at least once per calendar month to confirm that posted labels as required by b)(2)g are intact and legible.

(6) To determine the feed/charge rate, the permittee must calibrate, operate and maintain a device to measure and record the total weight of feed/charge to the emissions unit over the same operating cycle or time period used during the most recent performance test which demonstrated compliance with the applicable emission limitations.

(7) The feed/charge rate shall be recorded using a scale and a recorder, with calibration of the scale at least once every 6-month period to ± 1% accuracy. The feed/charge must be measured and recorded on an emissions unit-by-emissions unit basis. The permittee must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

(8) The permittee must calculate and record the 3-day, 24-hour rolling average emissions of D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

a. calculate and record the total weight of material charged to each emissions unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required above; and

b. multiply the total feed /charge weight to the emissions unit for the 24-hour period (in lbs/ton of feed/charge) by the emission rate for that emissions unit (as determined during the most recent performance test that demonstrated compliance) to provide emissions for each emissions unit for the 24-hour period, in pounds.

(9) The permittee must operate and maintain on a continuous basis a bag leak detection system as required below or a continuous opacity monitoring system as required in 40 CFR Part 63, Subpart RRR. Following initial adjustment of the system, the permittee must not adjust the sensitivity or range, averaging period, alarm set points or alarm delay time except as detailed in the OM&M Plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

(10) For the fabric filter inlet temperature, the permittee shall calibrate, maintain and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in Subparts A and RRR of 40 CFR Part 63. The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.

(11) To verify that sodium bicarbonate is always free-flowing in the continuous sodium bicarbonate injection system the permittee shall inspect each feed hopper or silo at least once each 8-hour period and record the results of each inspection. If sodium bicarbonate is found not to be free-flowing during any of the 8-hour periods, the permittee must increase the frequency of inspections to at least once every 4-hour period over the next 3 days. The permittee may return to inspections at least once every 8-hour period if corrective action results in no further blockages of sodium bicarbonate during the 3-day period.

The permittee has requested and received approval to install, operate and maintain a load cell, carrier gas/sodium bicarbonate flow indicator, carrier gas pressure drop measurement system or other system to confirm that sodium bicarbonate is free-flowing. Alternatively, the permittee may operate this system to determine the sodium bicarbonate is free-flowing in the continuous sodium bicarbonate injection system.

If sodium bicarbonate is found not to be free-flowing, the permittee must promptly initiate and complete corrective action. The permittee must record the sodium bicarbonate feeder setting once each day of operation.

(12) To determine the total reactive flux feed rates, the permittee shall record for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of solid reactive flux.

The permittee may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

(13) The permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and 40 CFR Part 63, Subpart RRR. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

The permittee may retain records on microfilm, computer disks, magnetic tape or microfiche. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

(14) In addition to the general records required by 40 CFR 63.10(b), the permittee must maintain records of:

a. for the bag leak detection system, the number of total operating hours for the emissions unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective actions taken;

b. for the sodium bicarbonate injected fabric filter, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective actions taken;

c. records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test;

d. records of monthly inspections for proper unit labeling for this furnace;

e. records of annual inspections of emission capture/collection and closed vent system; and

f. current copy of all required plans, including any revisions, with records documenting conformance with the applicable plant, including the SSMP and the OM&M plan.

(15) The permittee shall maintain monthly records of the volume (pounds) of sodium bicarbonate introduced into the baghouse for this emissions unit.

e) Reporting Requirements

(1) The permittee must develop a written startup, shutdown, and malfunction plan (SSMP) as described in 40 CFR Part 63, Subpart RRR, section 63.6(e)(3). The plan must contain specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The permittee shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown or malfunction is not consistent with the procedure in the plan as described in 40 CFR 63.6(e)(3).

(2) The permittee shall submit semiannual deviation reports to the Ohio EPA Northeast District Office within 60 days after the end of each 6-month period. The 6-month reporting periods shall be January 1 to June 30, and July 1 to December 31 of each calendar year. These reports shall report if any of the following conditions occurred during a 6-month period:

a. the corrective action specified in the OM&M Plan for a bag leak detection system alarm, or for a continuous opacity monitoring deviation, that was not initiated within 1 hour; and/or

b. any excursion of an operational requirement, as listed in C.1.c) of this permit.

(3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA Northeast District Office by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.

(4) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term d)(1) above:

a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;

b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.

(5) For the purpose of annual certifications of compliance required by 40 CFR Part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. any period of excess emissions, as defined in 40 CFR 63.1516(b)(1), that occurred during the year were reported as required by this subpart; and

b. all monitoring, record keeping, and reporting requirements were met during the year.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

PE shall not exceed 29.5 pounds per hour (Table I).

<u>Applicable Compliance Method</u>:

Compliance shall be demonstrated based on a one-time calculation by using the following equation:

E(PE) = (EP + EC) X (1-0.99)

where:

EP = Process emissions = 19 tons/hr (maximum process rate) X 2.60 lbs/ton (emission factor from AP-42 Table 12.8-4); and

EC = Natural gas combustion emissions = 52.0 mmBtu/hr (furnace maximum capacity) X 1 mmCF/1000 mmBtu X 7.60 lb/mmSCF (emission factor from AP-42, Chapter 1.4, filterable/condensable combined).

[(19 tons/hr X 2.60 lbs/ton) + (52.0 mmBtu/hr X 1 mmCF/1000 mmBtu X 7.60 lb/mmSCF)] X 0.01 = 0.5 lb/hr

b. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated through visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

c. Emission Limitation:

D/F emissions shall not exceed 2.1E-04 grain D/F TEQ per ton of feed or charge.

Applicable Compliance Method:

Compliance shall be demonstrated by emissions tests performed in accordance with the test methods and procedures specified in f)(2).

(2) The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than 90 days after startup and again within 12 months of permit expiration.

b. The following pollutants shall be tested using the appropriate test methods, to determine compliance with the emission limitations:

PE: 40 CFR Part 60, Appendix A, Method 5

HCl: 40 CFR Part 60, Appendix A, Method 26A

D/F: 40 CFR Part 60, Appendix A, Method 23A

Opacity: 40 CFR Part 60, Appendix A, Method 9

*Fugitives from building: 40 CFR Part 60, Appendix A, Method 22

*This permit for this emissions unit does not include a fugitive emission limitation from the building. However, this information shall be documented during the testing period.

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

c. The emission testing shall include a measurement and/or record of the following values, when the testing demonstrates compliance with all emission limitations:

i. the actual temperatures of the exhaust gases entering the baghouse;

ii. the actual amounts of sodium bicarbonate injected in the baghouse during the testing period;

iii. the actual feed rates of cover flux and SAF during the testing period;

iv. the actual pressure drops across the baghouse during the testing period; and

v. the actual aluminum feed/charge rate during the testing period.

d. The permittee shall use the above measurements/readings obtained during emission testing, when testing demonstrates compliance with all emission limitations, to determine the following in order to comply with the requirements in c)(1), c)(2), and c)(3):

i. maximum 3-hour block average temperature of the exhaust gases entering the baghouse, determined by the average inlet temperature during testing plus 25 degree Fahrenheit;

ii. the setting to feed/inject sodium bicarbonate to the baghouse;

iii. maximum feed rate for cover flux, determined by the average feed rates during testing; and

iv. maximum feed rate for SAF, determined by the average feed rates during testing.

e. 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 Ohio EPA Northeast District Office.

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an “Intent to Test” notification to the Ohio EPA Northeast District Office. 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 Northeast District Office’s refusal to accept the results of the emission test(s).

g. Personnel from the Ohio EPA Northeast District Office 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.

h. 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 Ohio EPA Northeast District Office 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 Ohio EPA Northeast District Office.

g) Miscellaneous Requirements

(1) None.

2. P902, Melting Furnace #2

Operations, Property and/or Equipment Description:

Secondary Aluminum Group 1 Stationary Melting Furnace, natural gas-fired with 40 mmBtu/hr heat input capacity and 10.0 TPH maximum melting capacity, processing only clean scrap

a) 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. b)(1)d.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	The emission limitations established pursuant to this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(D) for particulate emissions (PE), volatile organic compounds (VOC), sulfur dioxide (SO_2) and carbon monoxide (CO). See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/2006	See b)(2)b.
c.	ORC 3704.03(T)	The emission limitations established pursuant to this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(D) for nitrogen oxides (NO_x) and greenhouse gas (GHG) emissions.
d.	OAC rule 3745-31-05(D)	See B.2.a)(1).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
f.	OAC rule 3745-17-07(B)	See b)(2)c.
g.	OAC rule 3745-17-08(B)	See b)(2)d.
h.	OAC rule 3745-17-11	PE shall not exceed 19.2 pounds per hour (Table I).
i.	40 CFR Part 63, Subpart RRR	See b)(2)e. See c)(1) through c)(3).

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP) Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply: b)(1)f and b)(2)b.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, VOC, SO_2 and CO emissions from this emissions unit since the "uncontrolled" potential to emit is less than ten tons per year.

c. In accordance with OAC rule 3745-17-07(B)(11)d, OAC rule 3745-17-07(B)(1) shall not apply to any fugitive emissions unit which is exempted from the requirements of OAC rule 3745-17-08(B).

d. The facility is not located at an Appendix A area of OAC rule 3745-17-08. In accordance with OAC rule 3745-17-08 (A)(1), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

e. This facility is subject to the requirements of 40 CFR Part 63, Subpart RRR, because it meets the definition of a secondary aluminum production facility in section 63.1503. However, because this emissions unit is a Group 1 furnace processing clean charge only, the requirements of 40 CFR Part 63, Subpart RRR, do not apply to this emissions unit pursuant to section 63.1500(c)(4).

c) Operational Restrictions

(1) The permittee shall charge this emissions unit with clean aluminum material only. Clean material charge is defined as follows: "materials including molten aluminum; T-bar; sow; ingot; billet; pig; alloying elements; uncoated/ unpainted thermally dried aluminum chips; aluminum scrap dried at 650°F or higher; aluminum scrap delacquered/ decoated at 900°F or higher; other oil and lubricant free unpainted/ uncoated gates and risers; oil and lubricant free unpainted/ uncoated aluminum scrap, shapes, or products (e.g. pistons) that have not undergone any process (e.g. machining, coating, painting, etc.) that would cause contamination of the aluminum (with oils, lubricants, coatings, or paints); and internal runaround."

(2) Alloying, if any is performed in this emissions unit, shall be done with only clean materials, i.e., free of HAP's or precursors to HAP's.

(3) Chlorine gas shall not be added to this emissions unit for the purpose of demagging the aluminum.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of permissible feed/charge materials to demonstrate only clean charge materials are being utilized. The permittee shall maintain records of the flux materials used by name and manufacturer, the halogen content of each flux, and the quantity of flux used per batch of aluminum processed.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA Northeast District Office by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

PE shall not exceed 19.2 pounds per hour (Table I).

Applicable Compliance Method:

Compliance shall be demonstrated based on a one-time calculation by using the following equation:

E(PE) = EP + EC

where:

EP = Process emissions = 10 tons/hr (maximum process rate) X 0.03 lb/ton (emission factor from March 2013 stack test of a similar source); and

EC = Natural gas combustion emissions = 40.0 mmBtu/hr (furnace maximum capacity) X 1 mmCF/1000 mmBtu X 7.60 lb/mmSCF (emission factor from AP-42, Chapter 1.4, filterable/condensable combined).

[(10 tons/hr X 0.03 lb/ton) + (40.0 mmBtu/hr X 1 mmCF/1000 mmBtu X 7.60 lb/mmSCF)] = 0.6 lb/hr

b. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated through visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

(2) The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than 90 days after startup and again within 12 months of permit expiration.

b. The following pollutants shall be tested using the appropriate test methods, to determine compliance with the emission limitations:

PE: 40 CFR Part 60, Appendix A, Method 5

Opacity: 40 CFR Part 60, Appendix A, Method 9

*Fugitives from building: 40 CFR Part 60, Appendix A, Method 22

*This permit for this emissions unit does not include a fugitive emission limitation from the building. However, this information shall be documented during the testing period.

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

c. The emission testing shall include a measurement and/or record of the following values, when the testing demonstrates compliance with all emission limitations:

i. the actual feed rates of cover flux and SAF during the testing period; and

ii. the actual aluminum feed/charge rate during the testing period.

d. 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 Ohio EPA Northeast District Office.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. 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 Northeast District Office's refusal to accept the results of the emission test(s).

f. Personnel from the Ohio EPA Northeast District Office 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.

g. 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 Ohio EPA Northeast District Office 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 Ohio EPA Northeast District Office.

g) Miscellaneous Requirements

(1) None.

3. P903, Thermal Chip Dryer #1

Operations, Property and/or Equipment Description:

11 mmBtu/hr Natural Gas-Fired Thermal Chip Dryer w/Thermal Oxidizer and Cyclone

a) 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. b)(1)d.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	The emission limitations established pursuant to this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(D) for particulate emissions (PE) and the emission limitations provided in 40 CFR Part 63, Subpart RRR. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/2006	See b)(2)b.
c.	ORC 3704.03(T)	The emission limitations established pursuant to this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(D) for nitrogen oxides (NO_x), greenhouse gas (GHG), volatile organic compound (VOC) and sulfur dioxide (SO_2) emissions.
d.	OAC rule 3745-31-05(D)	See B.2.a)(1) and c)(1).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
f.	OAC rule 3745-17-07(B)	See b)(2)c.
g.	OAC rule 3745-17-08(B)	See b)(2)d.
h.	OAC rule 3745-17-11	PE shall not exceed 14.4 pounds per hour (Table I).
i.	40 CFR Part 63, Subpart RRR	Emissions of Dioxin/Furans (D/F) shall not exceed 3.5E-05 grain TEQ* per ton of aluminum feed. [40 CFR 63.1505(c)(2)] *TEQ means the international method of expressing toxicity equivalents for dioxins and furans as defined in 40 CFR 63.1503. See c)(1) through c)(4).

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC Rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP) Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply: b)(1)f and b)(2)b.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE from this emissions unit since the "controlled" and "uncontrolled" potential to emit is less than ten tons per year.

c. In accordance with OAC rule 3745-17-07(B)(11)d, OAC rule 3745-17-07(B)(1) shall not apply to any fugitive emissions unit which is exempted from the requirements of OAC rule 3745-17-08(B).

d. The facility is not located at an Appendix A area of OAC rule 3745-17-08. In accordance with OAC rule 3745-17-08 (A)(1), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

(1) The permittee shall operate the thermal oxidizer whenever this emissions unit is in operation.

(2) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart RRR, including the following:

63.1506(c)	Emissions capture and collection system; OM&M plan[1] procedures
63.1506(d)	Measurement of charge/feed weight or production weight.
63.1506(f)	Chip dryer w/afterburner: maintain minimum afterburner temperature; use only unpainted aluminum chips.

[1]OM&M plan- Operation, Maintenance, and Monitoring plan

(3) The permittee shall maintain the afterburner operating average temperature for each 3-hour period at or above the average operating temperature established during the initial and/or most recent performance test which demonstrated compliance with all applicable emission limits. Until such time, the average operating temperature of the thermal incinerator shall be 1400 degrees F.

(4) The permittee shall operate this thermal chip dryer using only unpainted aluminum chips as the feedstock.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) 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 also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(2) 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.

(3) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63, Subpart RRR, including the following sections:

63.1510(b)	Operation, maintenance, and monitoring OM&M plan[1] requirements
63.1510(d)	Annual inspection of capture/collection system
63.1510(e)	Record weight of feed/charge or aluminum production from, the emissions unit to 1% accuracy. Calibrate every 6 months.
63.1510(g)	Design, installation, calibration, maintenance, and operation of a device to continuously monitor and record the operating temperature of the afterburner
63.1510(k)	Record and certify type of materials charged to thermal chip dryer.
63.1517(a)	Maintenance of files of all information (including all reports and notifications) required by the general provisions (40 CFR 63.10(b)
63.1517(b)(2)	Additional recordkeeping requirements for the afterburner
63.1517(b)(6)	Records required by 63.10(c) for the afterburner Continuous Monitoring System (CMS) for the afterburner.
63.1517(b)(7)	Records of feed/charge or throughput rates
63.1517(b)(9)	Records of all charge materials for the thermal chip dryer
63.1517(b)(14)	Records of annual inspections of capture/collection system
63.1517(b)(16)	Current copies of startup, shutdown, and malfunction plans and OM&M plan

e) Reporting Requirements

(1) The permittee shall submit notifications and reports to Ohio EPA Northeast District Office as required pursuant to 40 CFR Part 63, Subpart RRR, per the following sections:

63.1515(a)(6)	Performance test notification
63.1515(a)	Startup, shutdown, and malfunction reports
63.1515(b)	Notification of compliance status report
63.1516(b)	Semi-annual excess emissions/summary reports

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA Northeast District Office by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.

(3) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term numbers d)(1) and d)(2) above:

a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;

b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

PE shall not exceed 14.4 pounds per hour (Table I).

<u>Applicable Compliance Method</u>:

Compliance shall be demonstrated based on a one-time calculation by using the following equation:

E(PE) = EP + EC

where:

EP = Process emissions = 6.5 tons/hr (maximum process rate) X 0.14 (emissions factor for PM-10 from stack testing results of similar equipment at Culp Aluminum Alloys and including a cyclone control efficiency); and

EC = Natural gas combustion emissions = 11.0 mmBtu/hr (furnace maximum capacity) X 1 mmCF/1000 mmBtu X 7.60 lb/mmSCF (emission factor from AP-42, Chapter 1.4, filterable/condensable combined).

[(6.5 tons/hr X 0.14 lb/ton) + (11.0 mmBtu/hr X 1 mmCF/1000 mmBtu X 7.60 lb/mmSCF)] = 1.0 lb/hr

b. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated through visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

c. Emission Limitation:

Emissions of D/F shall not exceed 3.5E-05 grain TEQ per ton of aluminum feed.

Applicable Compliance Method:

Compliance shall be demonstrated by emissions tests performed in accordance with the test methods and procedures specified in f)(2).

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. Performance testing shall be conducted as required in 40 CFR Part 63, Subpart RRR pursuant to 40 CFR 63.1511 and Subpart A of 40 CFR 63.7(c).

b. The permittee shall conduct performance tests to measure emissions of D/F at the outlet of the thermal oxidizer (afterburner) control device.

c. The emission testing shall be conducted no later than 90 days after startup and again within 12 months of permit expiration.

d. The permittee must conduct each test while the emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the emissions unit.

e. Each performance test for a batch process must consist of three separate runs; pollutant sampling for each run must be conducted over the entire process operating cycle. Compliance with an emissions limit is demonstrated if the average of the three runs is less than or equal to the emission limit.

f. The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s):

   i. For D/F, Methods 1-4 and 23 of 40 CFR Part 60, Appendix A

   ii. For PE, Methods 1-4 and 5 of 40 CFR Part 60, Appendix A

   Alternative test methods may be used subject to approval by the Administrator.

   iii. During the D/F performance tests, measure and record the operating temperature of the afterburner every 15 minutes.

g. The permittee must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510(b)(1) that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, the permittee must use the appropriate procedures in this section and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report.

h. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to Ohio EPA's Northeast District Office. 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 Ohio EPA's Northeast District Office's refusal to accept the results of the emission test(s).

i. Personnel from the appropriate Ohio EPA's Northeast 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.

j. In addition to the Notice of Compliance Status Report required by 40 CFR 63.1511(b) and 63.1515(b), 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 Ohio EPA's Northeast District Office 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 Ohio EPA's Northeast District Office.

g) Miscellaneous Requirements

(1) None.

4. P904, Rotary Furnace # 1

Operations, Property and/or Equipment Description:

Secondary Aluminum Group 1 Rotary Dross Melting Furnace, natural gas-fired with 6 mmBtu/hr heat input capacity and 2.53 TPH maximum melting capacity, equipped with a baghouse, processing only clean scrap

a) 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. b)(1)d.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	The emission limitations established pursuant to this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(D) for volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur dioxide (SO_2) and carbon monoxide (CO). See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/2006	See b)(2)b.
c.	ORC 3704.03(T)	The emission limitations established pursuant to this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(D) for particulate emissions (PE) and greenhouse gas (GHG) emissions.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-31-05(D)	See B.2.a)(1) and b)(2)e.
e.	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
f.	OAC rule 3745-17-07(B)	See b)(2)c.
g.	OAC rule 3745-17-08(B)	See b)(2)d.
h.	OAC rule 3745-17-11	PE shall not exceed 7.6 pounds per hour (Table I).
i.	40 CFR Part 63, Subpart RRR	Dioxins and Furans (D/F) emissions shall not exceed 2.1E-04 grain D/F TEQ per ton of feed or charge. See b)(2)f through b)(2)l. See c)(1) and c)(2).

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC Rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP) Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply: b)(1)f and b)(2)b.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC, NO_x, SO_2, and CO emissions from this emissions unit since the "uncontrolled" potential to emit is less than ten tons per year.

c. In accordance with OAC rule 3745-17-07(B)(11)d, OAC rule 3745-17-07(B)(1) shall not apply to any fugitive emissions unit which is exempted from the requirements of OAC rule 3745-17-08(B).

d. The facility is not located at an Appendix A area of OAC rule 3745-17-08. In accordance with OAC rule 3745-17-08 (A)(1), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

e. The emissions from this emissions unit shall be vented to a baghouse at all times the emissions unit is in operation.

f. Section 63.1503 of 40 CFR Part 63, Subpart RRR defines TEQ as the international method of expressing toxicity equivalents for dioxins and furans as defined in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and - Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016).

g. The permittee must provide and maintain easily visible labels posted at this emissions unit that identifies the applicable emission limits and means of compliance, including the type of emissions unit (e.g. group 1 furnace) and the applicable operational standards and control methods (work practice or control device). This includes, but is not limited to, the type of charge to be used (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the Operation, Maintenance and Monitoring (OM&M) Plan.

h. The permittee shall employ a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice." The permittee has conducted an evaluation of the capture and collection system for this furnace and modified the system accordingly.

i. For the bag leak detection system, the permittee shall initiate corrective action within 1 hour of a bag leak detection system alarm. The fabric filter system shall be operated such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period.

   In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time shall be counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the permittee takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the permittee to initiate corrective action.

j. This emissions unit shall be operated in accordance with the most current OM&M Plan and most current Startup, Shutdown and Malfunction Plan (SSMP).

k. When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the most recent performance test and incorporated in the OM&M Plan, the owner or operator must initiate corrective action. Corrective actions must restore operation of the affected source or emissions unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance

with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the most recent performance test and steps to prevent the likely recurrence of the cause of a deviation.

c) Operational Restrictions

(1) The permittee shall maintain the 3-hour block average inlet temperature for the fabric filter at or below the average temperature established during the most recent performance test which demonstrated compliance with the applicable emission limitations, plus 25 degrees Fahrenheit.

(2) The values for the parameters required in c)(1) above, that are established during the initial and/or most recent performance test which demonstrates compliance with the applicable emission limitations, shall be included as revisions to the OM&M Plan.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) 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 also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(2) The permittee shall properly operate and maintain equipment to continuously monitor and record the pressure drop across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be

installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee currently monitors and records the pressure drop continuously via the Programmable Logic Controller (PLC).

(3) Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The pressure drop shall be maintained within the range of the manufacturer's recommendations and/or the range established in the most recent passing compliance test.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA Northeast District Office. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(4) The permittee shall collect and record the following information for each day for the control equipment:

a. a log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

(5) The permittee must inspect the labels for this emissions unit at least once per calendar month to confirm that posted labels as required by b)(2)g are intact and legible.

(6) To determine the feed/charge rate, the permittee must calibrate, operate and maintain a device to measure and record the total weight of feed/charge to the emissions unit over the same operating cycle or time period used during the most recent performance test which demonstrated compliance with the applicable emission limitations.

(7) The feed/charge rate shall be recorded using a scale and a recorder, with calibration of the scale at least once every 6-month period to ± 1% accuracy. The feed/charge must be measured and recorded on an emissions unit-by-emissions unit basis. The permittee must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

(8) The permittee must calculate and record the 3-day, 24-hour rolling average emissions of D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

a. calculate and record the total weight of material charged to each emissions unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required above; and

b. multiply the total feed /charge weight to the emissions unit for the 24-hour period (in lbs/ton of feed/charge) by the emission rate for that emissions unit (as determined during the most recent performance test that demonstrated compliance) to provide emissions for each emissions unit for the 24-hour period, in pounds.

(9) The permittee must operate and maintain on a continuous basis a bag leak detection system as required below or a continuous opacity monitoring system as required in 40 CFR Part 63, Subpart RRR. Following initial adjustment of the system, the permittee must not adjust the sensitivity or range, averaging period, alarm set points or alarm delay time except as detailed in the OM&M Plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

(10) For the fabric filter inlet temperature, the permittee shall calibrate, maintain and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in Subparts A and RRR of 40 CFR Part 63. The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.

(11) To determine the total reactive flux feed rates, the permittee shall record for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of solid reactive flux.

The permittee may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time

period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

(12) The permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and 40 CFR Part 63, Subpart RRR. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

The permittee may retain records on microfilm, computer disks, magnetic tape or microfiche. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

(13) In addition to the general records required by 40 CFR 63.10(b), the permittee must maintain records of:

a. for the bag leak detection system, the number of total operating hours for the emissions unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective actions taken;

b. records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test;

c. records of monthly inspections for proper unit labeling for this furnace;

d. record of annual inspections of emission capture/collection and closed vent system; and

e. current copy of all required plans, including any revisions, with records documenting conformance with the applicable plant, including the SSMP and the OM&M plan.

e) Reporting Requirements

(1) The permittee must develop a written startup, shutdown, and malfunction plan (SSMP) as described in 40 CFR Part 63, Subpart RRR, Section 63.6(e)(3). The plan must contain specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The permittee shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown or malfunction is not consistent with the procedure in the plan as described in 40 CFR 63.6(e)(3).

(2) The permittee shall submit semiannual deviation reports to the Ohio EPA Northeast District Office within 60 days after the end of each 6-month period. The 6-month reporting periods shall be January 1 to June 30, and July 1 to December 31 of each

calendar year. These reports shall report if any of the following conditions occurred during a 6-month period:

a. the corrective action specified in the OM&M Plan for a bag leak detection system alarm, or for a continuous opacity monitoring deviation, that was not initiated within 1 hour; and/or

b. any excursion of an operational requirement, as listed in C.4.c) of this permit.

(3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA Northeast District Office by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.

(4) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term d)(1) above:

a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;

b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.

(5) For the purpose of annual certifications of compliance required by 40 CFR Part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. any period of excess emissions, as defined in 40 CFR 63.1516(b)(1), that occurred during the year were reported as required by this subpart; and

b. all monitoring, record keeping, and reporting requirements were met during the year.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

PE shall not exceed 7.6 pounds per hour (Table I).

<u>Applicable Compliance Method</u>:

Compliance shall be demonstrated based on a one-time calculation by using the following equation:

E(PE) = (EP + EC) X (1-0.99)

where:

EP = Process emissions = 2.53 tons/hr (maximum process rate) X 2.60 lbs/ton (emission factor from AP-42 Table 12.8-4); and

EC = Natural gas combustion emissions = 6.0 mmBtu/hr (furnace maximum capacity) X 1 mmCF/1000 mmBtu X 7.60 lb/mmSCF (emission factor from AP-42, Chapter 1.4, filterable/condensable combined).

[(2.53 tons/hr X 2.60 lbs/ton) + (6.0 mmBtu/hr X 1 mmCF/1000 mmBtu X 7.60 lb/mmSCF)] X 0.01 = 0.0005 lb/hr

b. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated through visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

c. Emission Limitation:

D/F emissions shall not exceed 2.1E-04 grain D/F TEQ per ton of feed or charge.

Applicable Compliance Method:

Compliance shall be demonstrated by stack testing in accordance with the requirements specified in f)(2).

(2) The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than 90 days after startup and again within 12 months of permit expiration.

b. The following pollutants shall be tested using the appropriate test methods, to determine compliance with the emission limitations:

PE: 40 CFR Part 60, Appendix A, Method 5

Opacity: 40 CFR Part 60, Appendix A, Method 9

*Fugitives from building: 40 CFR Part 60, Appendix A, Method 22

*This permit for this emissions unit does not include a fugitive emission limitation from the building. However, this information shall be documented during the testing period.

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

c. The emission testing shall include a measurement and/or record of the following values, when the testing demonstrates compliance with all emission limitations:

   i. the actual temperatures of the exhaust gases entering the baghouse;

   ii. the actual amounts of hydrated sodium bicarbonate injected in the baghouse during the testing period;

   iii. the actual feed rates of cover flux and SAF during the testing period;

   iv. the actual pressure drops across the baghouse during the testing period; and

   v. the actual aluminum feed/charge rate during the testing period.

d. The permittee shall use the above measurements/readings obtained during emission testing, when testing demonstrates compliance with all emission limitations, to determine the following in order to comply with the requirements in c)(1) and c)(2):

   i. maximum 3-hour block average temperature of the exhaust gases entering the baghouse, determined by the average inlet temperature during testing plus 25 degrees Fahrenheit;

   ii. maximum feed rate for cover flux, determined by the average feed rates during testing; and

   iii. maximum feed rate for SAF, determined by the average feed rates during testing.

e. 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 Ohio EPA Northeast District Office.

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an “Intent to Test” notification to the Ohio EPA Northeast District Office. 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 Northeast District Office’s refusal to accept the results of the emission test(s).

g. Personnel from the Ohio EPA Northeast District Office 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.

h. 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 Ohio EPA Northeast District Office 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 Ohio EPA Northeast District Office.

g) Miscellaneous Requirements

(1) None.