



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

9/29/2011

Certified Mail

Mr. Paul Platek
IMCO Recycling of Ohio LLC
7335 Newport Road Southeast
Uhrichsville, OH 44683

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0679030152
Permit Number: P0108435
Permit Type: Initial Installation
County: Tuscarawas

Yes	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Times-Reporter. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501.

Sincerely,

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

Cc: U.S. EPA Region 5 - *Via E-Mail Notification*
Ohio EPA-SEDO; Pennsylvania; West Virginia



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

This PTI is for an expansion project at the Aleris Rolled Products facility located at 7319 Newport Road Southeast in Uhrichsville, Ohio (Tuscarawas County). Aleris International, Inc. is the parent company of both the Aleris Rolled Products facility and the adjacent IMCO Recycling of Ohio LLC facility, and the combined facility is a major Title V source operating under facility ID 0679030152, facility name IMCO Recycling of Ohio LLC. In addition to being subject to Title V operating requirements, the combined facility is also a major stationary source as defined in OAC rule 3745-31-01(LLL)(2)(a)(xx) because potential facility-wide particulate emissions exceed 100 tons per year.

The emissions units (EUs) covered by this PTI include one new 6.25 ton per hour, 22 million BTU/hour sidewall group 1 aluminum melting furnace (EU P039), one new 6.25 ton per hour, 22 million BTU/hour single chamber, direct-fired group 1 aluminum melting furnace (EU P040), two new 6.25 ton per hour, nine million BTU/hour reverberatory group 2 aluminum holding furnaces (EUs P041 and P042), four new 2.08 ton per hour, single-chamber chlorine degassing units (in-line fluxers; EUs P043-P046), and a new 8.125 ton per hour, 12 million BTU/hour aluminum annealing furnace (EU P047). All proposed new furnaces will be fired with natural gas. With the addition of these new EUs, the company will also experience increased utilization of EU P023, the two-stand cold mill already in operation at the Aleris Rolled Products facility, but this EU is not being modified as defined in OAC rule 3745-31-01.

3. Facility Emissions and Attainment Status:

Tuscarawas County is currently in attainment for all criteria pollutants. The company has requested that the installation permit for this expansion project contain federally enforceable limitations on aluminum throughput in the two group 1 melting furnaces (EUs P039 and P040) sufficient to restrict facility-wide increases in emissions of PM₁₀ and PM_{2.5} below levels that would constitute a significant emissions increase and significant net emissions increase when increases in projected actual emissions from EU P023 are included. Each of the two melting furnaces is being limited to no more than 44,639 tons of aluminum throughput based on a rolling, 12-month summation, and as a result, major new source review is avoided for this project.

4. Source Emissions:

In the absence of throughput restrictions, this project would result in an increase of potential PM₁₀ emissions of 17.27 tons per year and an increase of potential PM_{2.5} emissions of 10.67 tons per year. By limiting EUs P039 and P040 to no more than 44,639 tons of aluminum based on a rolling, 12-month summation, PM₁₀ emissions increases are limited to 14.35 tons per rolling, 12-month period, below the 15 tons per year PM₁₀ significance level, and PM_{2.5} emissions increases are limited to 9.03 tons per rolling, 12-month period, less than the 10 tons per year PM_{2.5} significance level. Thus, the company has requested that the PTI for EUs P039 and P040 allow no more than 44,639 tons of aluminum throughput per melting furnace per rolling, 12-month period with associated monitoring, recordkeeping and reporting requirements.

5. Conclusion:

The operational restrictions, emissions limits, monitoring and record keeping requirements in this permit are sufficient to limit the potential to emit for this unit to below the major source significant modification thresholds for PM₁₀ and PM_{2.5}. Compliance with the federally enforceable limits of 9.47 tons of PM₁₀ and 4.34 tons of PM_{2.5} (EU P039), and 3.18 tons of PM₁₀ and 2.99 tons of PM_{2.5} (EU P040), based on rolling, 12-month summations, ensures that major new source review is not required for this expansion project.

6. Please provide additional notes or comments as necessary:

None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
PE/PM	12.94
PM ₁₀	14.02
PM _{2.5}	8.66
NO _x	19.66
CO	26.71
SO ₂	3.92
VOC	6.74

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install
IMCO Recycling of Ohio LLC

Issue Date: 9/29/2011
Permit Number: P0108435
Permit Type: Initial Installation
Permit Description: Installation of two melting furnaces, two holding furnaces, four degassing systems, and an annealing furnace at the Aleris Rolled Products aluminum rolling mill.
Facility ID: 0679030152
Facility Location: IMCO Recycling of Ohio LLC
7335 Newport Road Southeast, 7319 Newport Road Southeast
Uhrichsville, OH 44683
Facility Description: Secondary Smelting and Alloying of Aluminum

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: epa.ohio.gov/dapc/permit by entering the permit # or: Cara Cherry, Ohio EPA DAPC, Southeast District Office, 2195 Front Street, Logan, OH 43138. Ph: (740)385-8501



DRAFT

**Division of Air Pollution Control
Permit-to-Install
for
IMCO Recycling of Ohio LLC**

Facility ID:	0679030152
Permit Number:	P0108435
Permit Type:	Initial Installation
Issued:	9/29/2011
Effective:	To be entered upon final issuance



Division of Air Pollution Control
Permit-to-Install
for
IMCO Recycling of Ohio LLC

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. Federally Enforceable Standard Terms and Conditions 4
2. Severability Clause 4
3. General Requirements 4
4. Monitoring and Related Record Keeping and Reporting Requirements 5
5. Scheduled Maintenance/Malfunction Reporting 6
6. Compliance Requirements 6
7. Best Available Technology 7
8. Air Pollution Nuisance 7
9. Reporting Requirements 7
10. Applicability 8
11. Construction of New Sources(s) and Authorization to Install 8
12. Permit-To-Operate Application 9
13. Construction Compliance Certification 9
14. Public Disclosure 9
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 9
16. Fees 10
17. Permit Transfers 10
18. Risk Management Plans 10
19. Title IV Provisions 10
B. Facility-Wide Terms and Conditions 11
C. Emissions Unit Terms and Conditions 13
1. P039, Aluminum Melter #6 14
2. P040, Aluminum Melter #7 31
3. P047, Annealing Furnace #9 46
4. Emissions Unit Group - Chlorine degassing units: P043, P044, P045, P046 52
5. Emissions Unit Group - Holding furnaces: P041, P042 62



Authorization

Facility ID: 0679030152
Facility Description: Recycling center.
Application Number(s): A0042129
Permit Number: P0108435
Permit Description: Installation of two melting furnaces, two holding furnaces, four degassing systems, and an annealing furnace at the Aleris Rolled Products aluminum rolling mill.
Permit Type: Initial Installation
Permit Fee: \$6,400.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 9/29/2011
Effective Date: To be entered upon final issuance

This document constitutes issuance to:

IMCO Recycling of Ohio LLC
7335 Newport Road Southeast
7319 Newport Road Southeast
Uhrichsville, OH 44683

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

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138
(740)385-8501

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director



Authorization (continued)

Permit Number: P0108435
Permit Description: Installation of two melting furnaces, two holding furnaces, four degassing systems, and an annealing furnace at the Aleris Rolled Products aluminum rolling mill.

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

Emissions Unit ID: P039
Company Equipment ID: Aluminum Melter #6
Superseded Permit Number:
General Permit Category and Type: Not Applicable

Emissions Unit ID: P040
Company Equipment ID: Aluminum Melter #7
Superseded Permit Number:
General Permit Category and Type: Not Applicable

Emissions Unit ID: P047
Company Equipment ID: Annealing Furnace #9
Superseded Permit Number:
General Permit Category and Type: Not Applicable

Group Name: Chlorine degassing units

Table with 2 columns: Emissions Unit ID and details. Rows include P043, P044, P045, and P046 with their respective equipment IDs and categories.

Group Name: Holding furnaces

Table with 2 columns: Emissions Unit ID and details. Rows include P041 and P042 with their respective equipment IDs and categories.

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A.2.a), Severability Clause
 - (2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements
 - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A.9., Reporting Requirements
 - (5) Standard Term and Condition A.10., Applicability
 - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A.14., Public Disclosure
 - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A.16., Fees
 - (10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

Effective Date: To be entered upon final issuance

- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Southeast District Office.
 - (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions,

Effective Date: To be entered upon final issuance

and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Southeast District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

- (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Southeast District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Southeast District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

- a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.
- b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

Effective Date: To be entered upon final issuance

- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- d) The permittee shall submit progress reports to the Ohio EPA DAPC, Southeast District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Southeast District Office.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Southeast District Office. If no deviations occurred during a calendar quarter, the permitteeshall

submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., 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) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in Ohio EPA's "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., 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). All

Effective Date: To be entered upon final issuance

records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

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

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in Air Services once the transfer is legally completed. The change must be submitted through Air Services within thirty days of the ownership transfer date.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

B. Facility-Wide Terms and Conditions

Effective Date: To be entered upon final issuance

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.
2. Emissions units P039-P046 contained in this permit are subject to 40 CFR Part 63, Subpart RRR. The complete MACT requirements, including the MACT General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulation (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. P039, Aluminum Melter #6

Operations, Property and/or Equipment Description:

6.25 tons per hour, 22 million BTU per hour natural gas-fired, two chamber sidewall Group 1 aluminum melting furnace at the Newport Rolling Mill partially controlled with a lime injection baghouse and utilizing low NO_x burners; maximum throughput of 44,639 tons of aluminum per year

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) g)(1)

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.	ORC 3704.03(T)	The requirements of this rule are equivalent to the pound of particulate matter (PM) per ton of charge emissions limit in 40 CFR Part 63, Subpart RRR.
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD requirements for PM ₁₀ and PM _{2.5} and BAT for PM ₁₀ and PM _{2.5})	<p>Emissions of particulate matter less than 10 microns (PM₁₀) shall not exceed 9.51 tons per rolling, 12-month period.</p> <p>Emissions of particulate matter less than 2.5 microns (PM_{2.5}) shall not exceed 4.34 tons per rolling, 12-month period.</p> <p>Nitrogen oxide (NO_x) emissions shall not exceed and 8.50 tons per rolling, 12-month period.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 3.79 tons per rolling, 12-month period.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 5.52 tons per rolling, 12-month period.</p> <p>See c)(1) below.</p>

Effective Date: To be entered upon final issuance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>PM₁₀ emissions from the controlled sidewell shall not exceed 0.030 pound per ton of feed/charge.</p> <p>PM₁₀ emissions from the uncontrolled main hearth shall not exceed 0.396 pound per ton of feed/charge.</p> <p>PM_{2.5} emissions from the controlled sidewell shall not exceed 0.024 pound per ton of feed/charge.</p> <p>PM_{2.5} emissions from the uncontrolled main hearth shall not exceed 0.171 pound per ton of feed/charge.</p> <p>NO_x emissions from the controlled sidewell shall not exceed 0.205 pound per ton of feed/charge.</p> <p>NO_x emissions from the uncontrolled main hearth shall not exceed 0.176 pound per ton of feed/charge.</p> <p>SO₂ emissions from the controlled sidewell shall not exceed 0.149 pound per ton of feed/charge.</p> <p>SO₂ emissions from the uncontrolled main hearth shall not exceed 0.019 pound per ton of feed/charge.</p> <p>VOC emissions from the controlled sidewell shall not exceed 0.236 pound per ton of feed/charge.</p> <p>VOC emissions from the uncontrolled main hearth shall not exceed 0.0114 pound per ton of feed/charge.</p> <p>CO emissions shall not exceed 0.082 pound per million BTU and 7.94 tons per year.</p> <p>See b)(2)a. and f. below.</p>

Effective Date: To be entered upon final issuance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-31-05(E), as effective 12/01/06 (Voluntary restriction to avoid BAT for PM ₁₀ , PM _{2.5} and NO _x)	See b)(2)b. below.
e.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/1/06	See b)(2)c. below.
f.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six-minute average, at any time.
g.	OAC rule 3745-17-11(B)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3) and 40 CFR Part 63, Subpart RRR.
h.	OAC rule 3745-18-06(E)(2)	SO ₂ emissions shall not exceed 102.4 pounds per hour. This emissions limitation is less stringent than the limitation listed under OAC rule 3745-31-05(A)(3), until such time as U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan.
i.	40 CFR Part 63, Subpart RRR (40 CFR 63.1500-1520) [In accordance with 40 CFR 63.1500(a) and (b)(8), this emissions unit is a new group 1 furnace with add-on pollution controls constructed or reconstructed after February 11, 1999 at a secondary aluminum production facility subject to the emissions limitations and control measures specified in this section.]	The owner or operator of a group 1 furnace must use the limits in this paragraph to determine the emission standards for a SAPU. 0.20 kg of PM per Mg (0.40 lb of PM per ton) of feed/charge; 0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge or 10% of the uncontrolled HCl emissions; and 15 µg of D/F TEQ per Mg (2.1 × 10 ⁻⁴ gr of D/F TEQ per ton) of feed/charge [40 CFR 63.1505(i)] See b)(2)d. and e. below.
j.	40 CFR 63.1-19 (40 CFR 63.1518)	Appendix A to Subpart RRR of 40 CFR Part 63 – General Provisions Applicability to Subpart RRR, specifies the provisions of Subpart A that apply to owners and

Effective Date: To be entered upon final issuance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		operators of affected facilities subject to this subpart.

(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.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

- 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.

Permit to Install P0108435 for this air contaminant source takes into account the following voluntary restriction (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. the permittee shall control particulate emissions from the furnace (excluding particulate from fuel burning) with a lime-injected baghouses designed to meet short-term emission rates of 0.03 pound of PM₁₀ per ton of feed/charge and 0.024 pound of PM_{2.5} per ton of feed/charge, and shall control NO_x emissions using low-NO_x burners;
- ii. the maximum annual feed/charge weight rate for this emissions unit shall not exceed 44,639 tons; and
- iii. PM₁₀ emissions shall not exceed 9.51 tons per year, PM_{2.5} emissions shall not exceed 4.34 tons per year, and NO_x emissions shall not exceed 8.50 tons per year.

[OAC rule 3745-31-05(E), as effective 12/01/06]

- c. 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 CO, SO₂, and VOC emissions from this air

Effective Date: To be entered upon final issuance

contaminant source since the uncontrolled potential to emit for PE is less than 10 tons/yr.

[OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06]

- d. The owner or operator of a new affected source that commences construction or reconstruction after February 11, 1999 must comply with the requirements of this subpart by March 24, 2000 or upon startup, whichever is later.

[40 CFR 63.1501(b)]

- e. Pursuant to the permit application, the permittee is opting to meet the requirements of 40 CFR 63.1505(i) by conducting reactive fluxing only in the sidewell and by maintaining the molten metal level above the passage between the sidewell and the hearth. However, if the permittee conducts reactive fluxing (except for cover flux) in the hearth, or conducts reactive fluxing in the sidewell at times when the level of molten metal falls below the top of the passage between the sidewell and the hearth, the permittee must comply with the emission limits of paragraphs (i)(1) through (4) of 40 CFR 63.1505 on the basis of the combined emissions from the sidewell and the hearth.

[40 CFR 63.1505(i)(7)]

- f. The hourly and annual emission limitations for CO from natural gas combustion in this unit were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop additional monitoring, recordkeeping, and/or reporting requirements to ensure compliance with these limitations.

c) Operational Restrictions

- (1) The permittee has requested a federally enforceable limitation on feed/charge weight for the purposes of limiting potential to emit to avoid PSD requirements for PM₁₀ and PM_{2.5}. Therefore, the maximum feed/charge weight rate for this emissions unit shall not exceed 44,639 tons as a rolling, 12-month summation. To ensure compliance during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the feed/charge weight levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Cumulative Feed/charge Weight Rate(Tons)</u>
1-1	4,650
1-2	9,300
1-3	13,950
1-4	18,600
1-5	23,250
1-6	27,900
1-7	32,550
1-8	37,200
1-9	41,850
1-10	44,639

Effective Date: To be entered upon final issuance

1-11 44,639
1-12 44,639

After the first 12 calendar months of operation following the startup of emissions unit P039, compliance with the feed/charge weight rate limitation shall be based upon a rolling, 12-month summation of the feed/charge weight rate.

[OAC rule 3745-31-05(D)]

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

63.1506(b)	Labeling of each group 1 furnace
63.1506(c)	Emission capture and collection; OM&M plan procedures
63.1506(d)	Measurement of feed charge weight
63.1506(m)(1)	Bag leak detection system operating requirements for lime injected baghouse
63.1506(m)(3)	Lime injected baghouse inlet temperature limitations
63.1506(m)(4)	Lime injection procedures
63.1506(m)(5)	Total reactive flux injection rate limitation
63.1506(m)(6)(i)	Maintenance of molten metal above the passage between the hearth and sidewall
63.1506(m)(6)(ii)	Reactive fluxing only in the sidewall
63.1506(p)	Corrective action for operating parameter deviations
63.1511(g)	Establish monitoring and operating parameter values

- (3) The permittee shall burn only natural gas in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
- a. the feed/charge weight rate for each month;
 - b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the feed/charge weight rate; and

Effective Date: To be entered upon final issuance

- c. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative feed/charge weight rate for each calendar month.

[OAC rule 3745-31-05(D)]

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

63.1510(a)	Monitoring of control equipment and processes after initial performance test required
63.1510(b)	Operation, maintenance, and monitoring (OM&M) plan requirements
63.1510(c)	Label inspections
63.1510(d)	Installation, operation, maintenance and inspections of capture/collection system
63.1510(e)	Installation, calibration, operation and maintenance of device to measure and record the total weight of feed/charge to, or the aluminum production from, the emission unit
63.1510(f)	Bag leak detection system requirements
63.1510(h)	Fabric filter inlet temperature monitoring
63.1510(i)(1)	Verification that lime is free-flowing in continuous lime injection system
63.1510(i)(2)	Daily recording of the lime feeder setting for continuous lime injection system
63.1510(j)	Monitoring and recording of total reactive flux injection rate
63.1510(n)(1)	Monitoring and recording of sidewell molten metal level
63.1510(u)	Individual emissions unit compliance demonstration
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)	Additional general recordkeeping requirements for owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit)

Effective Date: To be entered upon final issuance

- (3) 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.

e) Reporting Requirements

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

63.1510(b)	Submittal of OM&M plan
63.1510(n)(2)	Semi-annual certification of compliance with operational standards in 63.1506(m)(6)
63.1515(a)	Initial notifications
63.1511(b), 63.1512(q), 63.1512(r), 63.1512(s) and 63.1515(b)	Notification of compliance status report after initial performance test
63.1516(a)	Startup, shutdown, and malfunction plan/reports
63.1516(b)	Semi-annual excess emissions/summary reports
63.1516(c)	Annual certifications of continuing compliance

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

f) Testing Requirements

- (1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitations:
PM₁₀ emissions from the controlled sidewall shall not exceed 0.030 pound per ton of feed/charge.
PM₁₀ emissions from the uncontrolled main hearth shall not exceed 0.396 pound per ton of feed/charge.
PM₁₀ emissions shall not exceed 9.51 tons per rolling, 12-month period.

Effective Date: To be entered upon final issuance

Applicable Compliance Method:

Compliance with the short-term emissions limitations shall be based upon the emissions factors for PM₁₀ from the permittee's application. These emissions factors are based upon 2008 stack testing at similar sources.

If required, compliance with the pound per ton of feed/charge emission factors (on a per batch basis) for PM₁₀ shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" and 40 CFR Part 51, Appendix M, Method 201 or 201A, as appropriate.

Compliance with the rolling, 12-month emissions limitation for PM₁₀ shall be demonstrated by the following calculation:

$$E = [(M \times EF_s) + (M \times EF_m)]/2,000\text{lbs}$$

Where:

E = the emission rate, in tons, based on a rolling, 12-month summation;

M = the feed/charge rate, in tons, during the rolling, 12-month period from d)(1)b. or c.;

EF_s = 0.030 lb PM₁₀/ton of feed/charge; controlled sidewall PM₁₀ emissions factor (from permittee's application); and

EF_m = 0.396 lb PM₁₀/ton of feed/charge; uncontrolled main hearth PM₁₀ emissions factor (from permittee's application).

[OAC rules 3745-31-05(A)(3), as effective 11/30/01 and 3745-31-05(D)]

b. **Emissions Limitations:**

PM_{2.5} emissions from the controlled sidewall shall not exceed 0.024 pound per ton of feed/charge.

PM_{2.5} emissions from the uncontrolled main hearth shall not exceed 0.171 pound per ton of feed/charge.

PM_{2.5} emissions shall not exceed 4.34 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the short-term emissions limitations shall be based upon the emissions factors for PM_{2.5} from the permittee's application. These emissions factors are based upon 2008 stack testing at similar sources.

If required, compliance with the pound per ton of feed/charge emission factors (on a per batch basis) for PM_{2.5} shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" and 40 CFR Part 51, Appendix M, Method 201 or 201A, as appropriate.

Compliance with the rolling, 12-month emissions limitation for PM_{2.5} shall be demonstrated by the following calculation:

$$E = [(M \times EF_s) + (M \times EF_m)]/2,000\text{ lbs}$$

Effective Date: To be entered upon final issuance

Where:

E = the emission rate, in tons, based on a rolling, 12-month summation;

M = the feed/charge rate, in tons, during the rolling, 12-month period from d)(1)b. or c.;

EF_s = 0.024 lb PM_{2.5}/ton of feed/charge; controlled sidewall PM_{2.5} emissions factor (from permittee's application); and

EF_m = 0.171 lb PM_{2.5}/ton of feed/charge; uncontrolled main hearth PM_{2.5} emissions factor (from permittee's application).

[OAC rules 3745-31-05(A)(3), as effective 11/30/01 and 3745-31-05(D)]

c. Emissions Limitations:

NO_x emissions from the controlled sidewall shall not exceed 0.205 pound per ton of feed/charge.

NO_x emissions from the uncontrolled main hearth shall not exceed 0.176 pound per ton of feed/charge.

NO_x emissions shall not exceed and 8.50 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the short-term emissions limitations shall be based upon the emissions factors for NO_x from the permittee's application. These emissions factors are based upon 2008 stack testing at similar sources.

If required, NO_x emissions (on a per batch basis) shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the rolling, 12-month emissions limitation for NO_x shall be demonstrated by the following calculation:

$$E = [(M \times EF_s) + (M \times EF_m)]/2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons, based on a rolling, 12-month summation;

M = the feed/charge rate, in tons, during the rolling, 12-month period from d)(1)b. or c.;

EF_s = 0.205 pound NO_x/ton of feed/charge; controlled sidewall emissions factor (from permittee's application); and

EF_m = 0.176 pound NO_x/ton of feed/charge; uncontrolled main hearth emissions factor (from permittee's application).

[OAC rules 3745-31-05(A)(3), as effective 11/30/01 and 3745-31-05(D)]

d. Emissions Limitations:

SO₂ emissions from the controlled sidewall shall not exceed 0.149 pound per ton of feed/charge.

Effective Date: To be entered upon final issuance

SO₂ emissions from the uncontrolled main hearth shall not exceed 0.019 pound per ton of feed/charge.

SO₂ emissions shall not exceed 3.79 tons per rolling, 12-month period.

SO₂ emissions shall not exceed 102.4 pounds per hour.

Applicable Compliance Method:

Compliance with the short-term emissions limitations shall be based upon the emissions factors for SO₂ from the permittee's application. These emissions factors are based upon 2008 stack testing at similar sources.

If required, SO₂ emissions (on a per batch basis) shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the rolling, 12-month emissions limitation for SO₂ shall be demonstrated by the following calculation:

$$E = [(M \times EF_s) + (M \times EF_m)]/2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons, based on a rolling, 12-month summation;

M = the feed/charge rate, in tons, during the rolling, 12-month period from d)(1)b. or c.;

EF_s = 0.019lb SO₂/ton of feed/charge; controlled sidewall emission factor (from permittee's application); and

EF_m = 0.149lbSO₂/ton of feed/charge; uncontrolled main hearth emission factor (from permittee's application).

[OAC rules 3745-31-05(A)(3), as effective 11/30/01 and 3745-31-05(D)]

e. Emissions Limitations:

VOC emissions from the controlled sidewall shall not exceed 0.236 pound per ton of feed/charge.

VOC emissions from the uncontrolled main hearth shall not exceed 0.0114 pound per ton of feed/charge.

VOC emissions shall not exceed 5.52 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the short-term emissions limitations shall be based upon the emissions factors for VOC from the permittee's application. These emissions factors are based upon 2008 stack testing at similar sources.

If required, VOC emissions (on a per batch basis) shall be determined according to test Methods 1 - 4 and 18, 25 or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Effective Date: To be entered upon final issuance

Compliance with the rolling, 12-month emissions limitation for VOC shall be demonstrated by the following calculation:

$$E = [(M \times EF_s) + (M \times EF_m)]/2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons, based on a rolling, 12-month summation;

M = the feed/charge rate, in tons, during the rolling, 12-month period from d)(1)b. or c.;

EF_s = 0.236 pound VOC/ton of feed/charge; controlled sidewall emission factor (from permittee's application)

EF_m = 0.0114 pound VOC/ton of feed/charge; uncontrolled main hearth emission factor (from permittee's application).

[OAC rules 3745-31-05(A)(3), as effective 11/30/01 and 3745-31-05(D)]

f. Emissions Limitations:

CO emissions shall not exceed 0.082 pound per million BTU and 7.94 tons per year.

Applicable Compliance Method:

Compliance with the short-term emissions limitation shall be based upon the emissions factor for CO from AP-42, Table 1.4-1 (7/98) for small boilers.

If required, CO emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation for CO shall be demonstrated by the following calculation:

$$E = (M_f \times EF \times 8,760 \text{ hours/yr})/2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons per year;

M_f = 22 million BTU/hr; the maximum natural gas fuel input capacity; and

EF = 0.082 lb CO/million BTU; CO emission factor from AP-42 Table 1.4-1 (7/98) for small boilers.

[OAC rules 3745-31-05(A)(3), as effective 11/30/01 and 3745-31-05(D)]

g. Emissions Limitations:

Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six-minute average, at any time.

Effective Date: To be entered upon final issuance

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

[OAC rule 3745-17-07(A)]

h. Emissions Limitations:

The owner or operator of a group 1 furnace must use the limits in this paragraph to determine the emission standards for a SAPU.

0.20 kg of PM per Mg (0.40lb of PM per ton) of feed/charge;
0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge; and
15 µg of D/F TEQ per Mg (2.1×10^{-4} gr of D/F TEQ per ton) of feed/charge

Applicable Compliance Method:

Compliance shall be demonstrated based upon the testing requirements specified in f)(2).

[40 CFR 63.1505(i)]

(2) Performance testing shall be conducted as required in 40 CFR Part 63, Subpart RRR pursuant to 40 CFR 63.1511, 63.1512 and Subpart A of 40 CFR Part 63. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. Except as provided in f)(2)i. below, the emission testing to demonstrate compliance with the limits of 40 CFR Part 63, Subpart RRR shall be conducted within 90 days of the compliance date in 40 CFR 63.1501(b) and every five years following the initial performance test.

[40 CFR 63.1511(b) and 40 CFR 63.1511(e)]

b. The emissions testing shall be conducted to demonstrate compliance with the emission limitations specified in b)(1)i. of this permit, and in accordance with the requirements of 40 CFR Part 63.1511 and 63.1512.

[40 CFR 63.1511(b)]

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

For PM, Methods 1-5 of 40 CFR Part 60, Appendix A
For HCl, Methods 1-4 and 26 or 26A of 40 CFR Part 60, Appendix A
For D/F, Methods 1-4 and 23 of 40 CFR Part 60, Appendix A

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

[40 CFR 63.1511(c) and (d)]

d. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest melt rate achievable for the materials charged at the time of the test with charge materials representative of the range

Effective Date: To be entered upon final issuance

of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

[40 CFR 63.1511(b)(1)]

- e. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

[40 CFR 63.1511(b)(2)]

- f. 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.

[40 CFR 63.1511(b)(3)]

- g. Where multiple affected sources or emissions units are exhausted through a common stack, pollutant sampling for each run must be conducted over a period of time during which all affected sources or emissions units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter.

[40 CFR 63.1511(b)(4)]

- h. Initial compliance with an applicable emission limit or standard is demonstrated if the average of three runs conducted during the performance test is less than or equal to the applicable emission limit or standard.

[40 CFR 63.1511(b)(5)]

- i. The owner or operator of new or existing affected sources and emission units 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 that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, the owner or operator 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. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

- i. The complete emission test report(s) used as the basis of the parameter(s) is submitted.
- ii. The same test methods and procedures as required by this subpart were used in the test.
- iii. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

Effective Date: To be entered upon final issuance

- iv. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

[40 CFR 63.1511(g)]

- j. Prior to conducting a performance test required by this section, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c). In addition, no later than thirty (30) days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southeast 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, Southeast District Office's refusal to accept the results of the emissions test(s).

[40 CFR 63.1511(a)]

- k. The owner or operator must conduct performance tests to measure emissions of PM, HCl and DF at the outlet of the control device.

[40 CFR 63.1512(d)(1)]

- l. The owner or operator may choose to determine the rate of reactive flux addition to a group 1 furnace and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux added to the group 1 furnace is emitted as HCl. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

[40 CFR 63.1512(d)(3)]

- m. The owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must measure (or otherwise determine) and record the total weight of feed/charge to the affected source or emission unit for each of the three test runs and calculate and record the total weight. An owner or operator that chooses to demonstrate compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emission unit or affected source instead of the feed/charge weight.

[40 CFR 63.1512(k)]

- n. The owner or operator must use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate.

- i. Continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15 minute period during the HCl tests, determine and record the 15-minute block average weights, and calculate and

Effective Date: To be entered upon final issuance

record the total weight of the gaseous or liquid reactive flux for the 3 test runs;

- ii. Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;
- iii. Determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5.
- iv. Divide the weight of total chlorine usage (W_t) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and
- v. If a solid reactive flux other than magnesium chloride is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

[40 CFR 63.1512(o)]

- o. The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl tests to establish an operating parameter value for the feeder setting for each operating cycle or time period used in the performance test.
 - i. For continuous lime injection systems, ensure that lime in the feed hopper or silo is free-flowing at all times; and
 - ii. Record the feeder setting for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

[40 CFR 63.1512(p)]

- p. Use the following equations to determine compliance with an emission limit for PM and HCl:

$$E = \{C \times Q \times Ka\} / \{P\}$$

Where:

E = Emission rate of PM or HCl, kg/Mg (lb/ton) of feed;
C = Concentration of PM or HCl, g/dscm (g/dscf);
Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);
Ka = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr); and
P = Production rate, Mg/hr (ton/hr).

[40 CFR 63.1513(b)(1)]

Effective Date: To be entered upon final issuance

- q. Use the following equations to determine compliance with an emission limit for D/F:

$$E = \{C \times Q\} / \{P\}$$

Where:

E = Emission rate of D/F, $\mu\text{g}/\text{Mg}$ (g/ton) of feed;

C = Concentration of D/F, $\mu\text{g}/\text{dscm}$ (g/dscf);

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr); and

P = Production rate, Mg/hr (ton/hr).

To convert D/F measurements to TEQ units, the owner or operator must use the procedures and equations 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).

[40 CFR 63.1513(b)(2) and 63.1513(d)]

- r. Personnel from the Ohio EPA, Southeast 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.

[OAC rule 3745-77-07(C)(1)]

- s. 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 the Ohio EPA, Southeast District Office within 60 days following completion of test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Southeast District Office.

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute" in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI or PTIO.

[ORC 3704.03(F)(4)(b)]

2. P040, Aluminum Melter #7

Operations, Property and/or Equipment Description:

6.25 tons per hour, 22 million BTU per hour direct natural gas-fired, single-chamber Group 1 aluminum melting furnace at the Newport Rolling Mill utilizing only clean charge, limited reactive chlorine flux and low NO_x burners; maximum throughput of 44,639 tons of aluminum per year

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) g)(1)

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(D) (Synthetic minor to avoid PSD requirements for PM ₁₀ and PM _{2.5} and BAT for PM ₁₀ and PM _{2.5})	Emissions of particulate matter less than 10 microns (PM ₁₀) shall not exceed 3.18 tons per rolling, 12-month period. Emissions of particulate matter less than 2.5 microns (PM _{2.5}) shall not exceed 2.99 tons per rolling, 12-month period. See c)(1) below.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Particulate emissions (PE) shall not exceed 2.68 tons per year. PM ₁₀ emissions shall not exceed 0.142 pound per ton of feed/charge. PM _{2.5} emissions shall not exceed 0.134 pound per ton of feed/charge. Nitrogen oxides (NO _x) emissions shall not exceed 0.049 pound per million BTU and 4.72 tons per year. Carbon monoxide (CO) emissions shall not exceed 0.082 pound per million BTU and 7.94 tons per year.

Effective Date: To be entered upon final issuance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Sulfur dioxide (SO₂) emissions shall not exceed 0.0006 pound per million BTU and 0.058 ton per year.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 0.0054 pound per million BTU and 0.52 ton per year.</p> <p>The requirements of this rule include compliance with the requirements of 40 CFR Part 63, Subpart RRR.</p> <p>See b)(2)a. below.</p>
d.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/1/06	See b)(2)b. below.
e.	OAC rule 3745-17-07(A)	See b)(2)c. below.
f.	OAC rule 3745-17-11(B)(2)	See b)(2)d. below.
g.	OAC rule 3745-18-06(E)(2)	<p>SO₂ emissions shall not exceed 102.4 pounds per hour.</p> <p>This emissions limitation is less stringent than the limitation listed under OAC rule 3745-31-05(A)(3), until such time as U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan.</p>
h.	<p>40 CFR Part 63, Subpart RRR (40 CFR 63.1500-1520)</p> <p>[In accordance with 40 CFR 63.1500(a) and (b)(8), this emissions unit is a new group 1 furnace without add-on controls and processing only clean charge constructed or reconstructed after February 11, 1999 at a secondary aluminum production facility subject to the emissions limitations and control measures specified in this section.]</p>	<p>The owner or operator of a group 1 furnace must use the limits in this paragraph to determine the emission standards for a SAPU.</p> <p>0.20 kg of PM per Mg (0.40lb of PM per ton) of feed/charge; and 0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge. [40 CFR 63.1505(i)]</p> <p>See b)(2)e. below.</p>
i.	40 CFR 63.1-19 (40 CFR 63.1518)	Appendix A to Subpart RRR of 40 CFR Part 63 – General Provisions Applicability to Subpart RRR, specifies the provisions of Subpart A that apply to owners and operators of affected facilities subject to this subpart.

Effective Date: To be entered upon final issuance

- 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.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

- 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 particulate, NO_x, CO, SO₂ and VOC emissions from this air contaminant source since the uncontrolled potential to emit for particulate, NO_x, CO, SO₂ and VOC is less than 10 tons/yr.

[OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06]

- c. The uncontrolled mass rate of emissions (UMRE) for particulate matter from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II does not apply to this emissions unit.
- d. Since the mass emission limitation for particulate in OAC rule 3745-17-11(B)(2) is not applicable, the opacity limits in OAC rule 3745-17-07 are also not applicable pursuant to OAC rule 3745-17-07(A)(3)(h).
- e. The owner or operator of a new affected source that commences construction or reconstruction after February 11, 1999 must comply with the requirements of this subpart by March 24, 2000 or upon startup, whichever is later.

[40 CFR 63.1501(b)]

c) Operational Restrictions

- (1) The permittee has requested a federally enforceable limitation on feed/charge weight for the purposes of limiting potential to emit to avoid PSD requirements for PM₁₀ and PM_{2.5}. Therefore, the maximum feed/charge weight rate for this emissions unit shall not exceed 44,639 tons as a rolling, 12-month summation. To ensure compliance during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the feed/charge weight levels specified in the following table:

Effective Date: To be entered upon final issuance

<u>Months(s)</u>	<u>Maximum Cumulative Feed/charge Weight Rate(Tons)</u>
1-1	4,650
1-2	9,300
1-3	13,950
1-4	18,600
1-5	23,250
1-6	27,900
1-7	32,550
1-8	37,200
1-9	41,850
1-10	44,639
1-11	44,639
1-12	44,639

After the first 12 calendar months of operation following the startup of emissions unit P040, compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the production rate.

[OAC rule 3745-31-05(D)]

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

63.1506(b)	Labeling of each group 1 furnace
63.1506(d)	Measurement of feed charge weight
63.1506(n)(1)	Maintain total reactive chlorine flux injection rate at or below average rate established during performance test
63.1506(n)(2)	Operate in accordance with the work practice/pollution prevention measures in the OM&M Plan
63.1506(p)	Corrective action for operating parameter deviations

- (3) The permittee shall burn only natural gas in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
- a. the feed/charge weight rate for each month;
 - b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the feed/charge weight rate; and

Effective Date: To be entered upon final issuance

- c. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative feed/charge weight rate for each calendar month.

[OAC rule 3745-31-05(D)]

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

63.1510(b)	Operation, maintenance, and monitoring (OM&M) plan requirements
63.1510(c)	Label inspections
63.1510(e)	Installation, calibration, operation and maintenance of device to measure and record the total weight of feed/charge to, or the aluminum production from, the emission unit
63.1510(j)	Monitoring and recordkeeping of reactive flux injection rate
63.1510(o)	Develop site specific monitoring plan
63.1510(p)	Scrap inspection program
63.1510(q)	Scrap contaminant monitoring and recordkeeping program using a calculation method (optional)
63.1510(u)	Individual emissions unit compliance demonstration
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)	Additional general recordkeeping requirements for owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit)

- (3) 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.

Effective Date: To be entered upon final issuance

e) Reporting Requirements

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

63.1510(b)	Submittal of OM&M plan
63.1515(a)	Initial notifications
63.1511(b), 63.1512(r) and 63.1515(b)	Notification of compliance status report after initial performance test
63.1516(a)	Startup, shutdown, and malfunction plan/reports
63.1516(b)	Semi-annual excess emissions/summary reports
63.1516(c)	Annual certifications of continuing compliance

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

f) Testing Requirements

- (1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:
PE shall not exceed 2.68 tons per year.

Applicable Compliance Method:

Compliance with the annual emissions limitation for PE shall be demonstrated by the following calculation:

$$E = (M \times EF) / 2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons;

M = the annual feed/charge weightrate, in tons, from d)(1); and

EF= 0.120 pound PE/ton of feed/charge; PE emissions factor (from permittee's application).

[OAC rule 3745-31-05(D)]

- b. Emissions Limitations:
PM₁₀ emissions shall not exceed 0.142 pound per ton of feed/charge.
PM₁₀ emissions shall not exceed 3.18 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the short-term emissions limitation shall be based upon the emissions factor for PM₁₀ from the permittee's application and feed/charge weight on a per-batch basis. These emissions factors are based upon 2008 stack testing at similar sources.

If required, compliance with the PM₁₀ emission factor shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" and 40 CFR Part 51, Appendix M, Method 201 or 40 CFR Part 51, Appendix M, 201A, as appropriate.

Compliance with the rolling, 12-month emissions limitation for PM₁₀ shall be demonstrated by the following calculation:

$$E = (M \times EF) / 2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons, based on a rolling, 12-month summation;

M = the feed/charge rate, in tons, during the rolling, 12-month period from d)(1)b. or c.; and

EF = 0.142lb PM₁₀/ton of feed/charge; PM₁₀ emissions factor (from permittee's application).

[OAC rules 3745-31-05(A)(3), as effective 11/30/01 and 3745-31-05(D)]

- c. Emissions Limitations:
PM_{2.5} emissions shall not exceed 0.134 pound per ton of feed/charge.
PM_{2.5} emissions shall not exceed 2.99 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the short-term emissions limitation shall be based upon the emissions factor for PM_{2.5} from the permittee's application and feed/charge weight on a per-batch basis.

If required, compliance with the PM_{2.5} emission factor shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" and 40 CFR Part 51, Appendix M, Method 201 or 201A, as appropriate.

Compliance with the rolling, 12-month emissions limitation for PM_{2.5} shall be demonstrated by the following calculation:

$$E = (M \times EF) / 2,000 \text{ lbs}$$

Effective Date: To be entered upon final issuance

Where:

E = the emission rate, in tons, based on a rolling, 12-month summation;
M = the feed/charge rate, in tons, during the rolling, 12-month period from d)(1)b. or c.; and
EF = 0.134 lb PM_{2.5}/ton of feed/charge; PM_{2.5} emissions factor (from permittee's application).

[OAC rules 3745-31-05(A)(3), as effective 11/30/01 and 3745-31-05(D)]

- d. Emissions Limitations:
NO_x emissions shall not exceed 0.049 pound per million BTU and 4.72 tons per year.

Applicable Compliance Method:

Compliance with the short-term emissions limitation shall be based upon the emissions factor for NO_x from AP-42 Table 1.4-1 (7/98) for small boilers controlled with low-NO_x burners.

If required, NO_x emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation for NO_x shall be demonstrated by the following calculation:

$$E = [(M_f \times EF) \times 8,760 \text{ hours/yr}] / 2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons, based on a rolling, 12-month summation;
M_f = 22 million BTU/hr; the maximum natural gas fuel input capacity; and
EF = 0.049 pound NO_x/million BTU; NO_x emission factor from AP-42 Table 1.4-1 (7/98) for small boilers controlled with low-NO_x burners.

[OAC rules 3745-31-05(A)(3), as effective 11/30/01 and 3745-31-05(D)]

- e. Emissions Limitations:
CO emissions shall not exceed 0.082 pound per million BTU and 7.94 tons per year.

Applicable Compliance Method:

Compliance with the short-term emissions limitation shall be based upon the emissions factor for CO from AP-42 Table 1.4-1 (7/98) for small boilers.

If required, CO emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-

Effective Date: To be entered upon final issuance

approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation for CO shall be demonstrated by the following calculation:

$$E = (M_f \times EF \times 8,760 \text{ hours/yr}) / 2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons per year;
M_f = 22 million BTU/hr; the maximum natural gas fuel input capacity; and
EF = 0.082 lb CO/million BTU; CO emission factor from AP-42 Table 1.4-1 (7/98) for small boilers.

[OAC rules 3745-31-05(A)(3), as effective 11/30/01 and 3745-31-05(D)]

f. Emissions Limitations:

SO₂ emissions shall not exceed 0.0006 pound per million BTU and 0.058 ton per year.

SO₂ emissions shall not exceed 102.4 pounds per hour.

Applicable Compliance Method:

Compliance with the pound per million BTU emissions limitation shall be based upon the emissions factor for SO₂ from AP-42 Table 1.4-2 (7/98) for small boilers. Compliance with the pound per hour emissions limitation shall be demonstrated by the following calculation:

$$\begin{aligned} \text{SO}_2 \text{ (lbs/hr)} &= (\text{SO}_2 \text{ emission factor} \times \text{maximum hourly fuel input capacity}) \\ &= (0.0006 \text{ lb/ton} \times 22 \text{ million BTU/hr}) \\ &= 0.013 \text{ lb/hr} \end{aligned}$$

Where:

22 million BTU/hr = maximum natural gas fuel burning capacity

0.0006 lb/million BTU = emission factor for natural gas combustion from AP-42 Table 1.4-2 (7/98)

If required, SO₂ emissions shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation for SO₂ shall be demonstrated by the following calculation:

$$E = (M_f \times EF \times 8,760 \text{ hours/yr}) / 2,000 \text{ lbs}$$

Effective Date: To be entered upon final issuance

Where:

E = the emission rate, in tons, based on a rolling, 12-month summation;
M_f = 22 million BTU/hr; the maximum fuel input capacity; and
EF = 0.0006 lb SO₂/million BTU; SO₂emission factor from AP-42 Table 1.4-2 (7/98) for small boilers.

[OAC rules 3745-31-05(A)(3), as effective 11/30/01 and 3745-31-05(D)]

- g. Emissions Limitations:
VOC emissions shall not exceed 0.0054 pound per million BTU and 0.52 ton per year.

Applicable Compliance Method:

Compliance with the pound per million BTU emissions limitation shall be based upon the emissions factor for VOC from AP-42 Table 1.4-2 (7/98) for small boilers.

If required, VOC emissions shall be determined according to test Methods 1 - 4 and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation for VOC shall be demonstrated by the following calculation:

$$E = (M_f \times EF \times 8,760 \text{ hours/yr}) / 2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons, based on a rolling, 12-month summation;
M_f = 22 million BTU/hr; the maximum fuel input capacity; and
EF = 0.0054 pound VOC/million BTU; VOC emission factor from AP-42 Table 1.4-2 (7/98) for small boilers.

[OAC rules 3745-31-05(A)(3), as effective 11/30/01 and 3745-31-05(D)]

- h. Emissions Limitations:
Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six-minute average, at any time.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

[OAC rule 3745-17-07(A)]

Effective Date: To be entered upon final issuance

- i. Emissions Limitations:
The owner or operator of a group 1 furnace must use the limits in this paragraph to determine the emission standards for a SAPU.

0.20 kg of PM per Mg (0.40lb of PM per ton) of feed/charge;
0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge; and

Applicable Compliance Method:

Compliance shall be demonstrated based upon the testing requirements specified in f)(2).

[40 CFR 63.1505(i)]

- (2) Performance testing shall be conducted as required in 40 CFR Part 63, Subpart RRR pursuant to 40 CFR 63.1511, 63.1512 and Subpart A of 40 CFR Part 63. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. Except as provided in f)(2)l. below, the emission testing to demonstrate compliance with the limits of 40 CFR Part 63, Subpart RRR shall be conducted within 90 days of the compliance date in 40 CFR 63.1501(b) and every five years following the initial performance test.

[40 CFR 63.1511(b) and 40 CFR 63.1511(e)]

- b. The emissions testing shall be conducted to demonstrate compliance with the emission limitations specified in b)(1)h. of this permit, and in accordance with the requirements of 40 CFR Part 63.1511 and 63.1512.

[40 CFR 63.1511(b)]

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

For PM, Methods 1-5 of 40 CFR Part 60, Appendix A

For HCl, Methods 1-4 and 26 or 26A of 40 CFR Part 60, Appendix A

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

[40 CFR 63.1511(c) and (d)]

- d. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest melt rate achievable for the materials charged at the time of the test with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

[40 CFR 63.1511(b)(1)]

- e. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified

Effective Date: To be entered upon final issuance

in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

[40 CFR 63.1511(b)(2)]

- f. 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.

[40 CFR 63.1511(b)(3)]

- g. Where multiple affected sources or emissions units are exhausted through a common stack, pollutant sampling for each run must be conducted over a period of time during which all affected sources or emissions units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter.

[40 CFR 63.1511(b)(4)]

- h. Initial compliance with an applicable emission limit or standard is demonstrated if the average of three runs conducted during the performance test is less than or equal to the applicable emission limit or standard.

[40 CFR 63.1511(b)(5)]

- i. The owner or operator of new or existing affected sources and emission units 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 that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, the owner or operator 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. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

- i. The complete emission test report(s) used as the basis of the parameter(s) is submitted.
- ii. The same test methods and procedures as required by this subpart were used in the test.
- iii. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.
- iv. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

[40 CFR 63.1511(g)]

- j. Prior to conducting a performance test required by this section, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c). In addition, no later than thirty (30) days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southeast 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, Southeast District Office's refusal to accept the results of the emissions test(s).

[40 CFR 63.1511(a)]

- k. The owner or operator of a group 1 furnace without add-on air pollution control devices and processing only clean charge must conduct performance tests to measure emissions of PM and HCl at the furnace exhaust outlet. A D/F test is not required.

[40 CFR 63.1512(e)(2)]

- l. The owner or operator may choose to determine the rate at which reactive chlorine flux is added to a group 1 furnace and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all chlorine in the reactive flux added to the group 1 furnace is emitted. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

[40 CFR 63.1512(e)(3)]

- m. The owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must measure (or otherwise determine) and record the total weight of feed/charge to the affected source or emission unit for each of the three test runs and calculate and record the total weight. An owner or operator that chooses to demonstrate compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emission unit or affected source instead of the feed/charge weight.

[40 CFR 63.1512(k)]

- n. The owner or operator must use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate.
 - i. Continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15 minute period during the HCl tests, determine and record the 15-minute block average weights, and calculate and record the total weight of the gaseous or liquid reactive flux for the 3 test runs;

Effective Date: To be entered upon final issuance

- ii. Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;
- iii. Determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5.
- iv. Divide the weight of total chlorine usage (W_t) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and
- v. If a solid reactive flux other than magnesium chloride is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

[40 CFR 63.1512(o)]

- o. Use the following equation to determine compliance with an emission limit for PM and HCl:

$$E = \{C \times Q \times Ka\} / \{P\}$$

Where:

E = Emission rate of PM or HCl, kg/Mg (lb/ton) of feed;
C = Concentration of PM or HCl, g/dscm (gr/dscf);
Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);
Ka = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr); and
P = Production rate, Mg/hr (ton/hr).

[40 CFR 63.1513(b)(1)]

- p. Personnel from the Ohio EPA, Southeast 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.

[OAC rule 3745-77-07(C)(1)]

- q. 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 the Ohio EPA, Southeast District Office within 60 days following completion of test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Southeast District Office.

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute" in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI or PTIO.

[ORC 3704.03(F)(4)(b)]

Effective Date: To be entered upon final issuance

3. P047, Annealing Furnace #9

Operations, Property and/or Equipment Description:

8.125 tons per hour, 12 million BTU per hour annealing furnace equipped with low-NO_x burners at the Newport Rolling Mill for heat treating of rolled aluminum coil; maximum throughput of 71,175 tons of aluminum per year

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) g)(1)

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 11/30/01	Particulate emissions (PE), emissions of particulate matter less than 10 microns (PM ₁₀) and emissions of particulate matter less than 2.5 microns (PM _{2.5}) shall not exceed 0.0075 pound per million BTU and 0.39 ton per year. Nitrogen oxides (NO _x) emissions shall not exceed 0.049 pound per million BTU and 2.58 tons per year. Carbon monoxide (CO) emissions shall not exceed 0.082 pound per million BTU and 4.33 tons per year. Sulfur dioxide (SO ₂) emissions shall not exceed 0.0006 pound per million BTU and 0.031 ton per year. Volatile organic compound (VOC) emissions shall not exceed 0.0054 pound per million BTU and 0.28 ton per year. The requirements of this rule include compliance with OAC rule 3745-17-07(A). See b)(2)a. below.

Effective Date: To be entered upon final issuance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/1/06	See b)(2)b. below.
c.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six-minute average, at any time.
d.	OAC rule 3745-17-10(B)(1)	PE shall not exceed 0.020 pound per million BTU actual heat input. This emissions limitation is less stringent than the limitation listed under OAC rule 3745-31-05(A)(3), until such time as U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan.

(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.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

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 particulate, NO_x, CO, SO₂ and VOC emissions from this air contaminant source since the uncontrolled potential to emit for particulate, NO_x, CO, SO₂ and VOC is less than 10 tons/yr.

[OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06]

c) Operational Restrictions

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

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

e) Reporting Requirements

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

f) Testing Requirements

- (1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitations:

PE and emissions of PM₁₀ and PM_{2.5} shall not exceed 0.0075 pound per million BTU and 0.39 ton per year.

PE shall not exceed 0.020 pound per million BTU actual heat input.

Applicable Compliance Method:

Compliance with the short-term emissions limitations shall be based upon the emissions factor for total PM from AP-42, Table 1.4-2 (7/98) for small boilers.

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be demonstrated by the following calculation:

$$E = (M_f \times EF \times 8,760 \text{ hours/yr}) / 2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons per year;

M_f = 12 million BTU/hr; the maximum natural gas fuel input capacity; and

Effective Date: To be entered upon final issuance

EF = 0.0075 lb PM/million BTU; total PM emission factor from AP-42 Table 1.4-2 (7/98) for small boilers.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

- b. Emissions Limitations:
NO_x emissions shall not exceed 0.049 pound per million BTU and 2.58 tons per year.

Applicable Compliance Method:

Compliance with the short-term emissions limitation shall be based upon the emissions factor for NO_x from AP-42, Table 1.4-1 (7/98) for small boilers controlled with low-NO_x burners.

If required, NO_x emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be demonstrated by the following calculation:

$$E = (M_f \times EF \times 8,760 \text{ hours/yr}) / 2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons per year;

M_f = 12 million BTU/hr; the maximum natural gas fuel input capacity; and

EF = 0.049 lbNO_x/million BTU; NO_x emission factor from AP-42 Table 1.4-1 (7/98) for small boilers controlled with low-NO_x burners.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

- c. Emissions Limitations:
CO emissions shall not exceed 0.082 pound per million BTU and 4.33 tons per year.

Applicable Compliance Method:

Compliance with the short-term emissions limitation shall be based upon the emissions factor for CO from AP-42, Table 1.4-1 (7/98) for small boilers.

If required, CO emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Effective Date: To be entered upon final issuance

Compliance with the annual emissions limitation shall be demonstrated by the following calculation:

$$E = (M_f \times EF \times 8,760 \text{ hours/yr}) / 2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons per year;
M_f = 12 million BTU/hr; the maximum natural gas fuel input capacity; and
EF = 0.082 lb CO/million BTU; CO emission factor from AP-42 Table 1.4-1 (7/98) for small boilers.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

- d. Emissions Limitations:
SO₂ emissions shall not exceed 0.0006 pound per million BTU and 0.031 ton per year.

Applicable Compliance Method:

Compliance with the short-term emissions limitation shall be based upon the emissions factor for SO₂ from AP-42, Table 1.4-2 (7/98) for small boilers.

If required, SO₂ emissions shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be demonstrated by the following calculation:

$$E = (M_f \times EF \times 8,760 \text{ hours/yr}) / 2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons per year;
M_f = 12 million BTU/hr; the maximum natural gas fuel input capacity; and
EF = 0.0006 lb SO₂/million BTU; SO₂ emission factor from AP-42 Table 1.4-2 (7/98) for small boilers.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

- e. Emissions Limitations:
VOC emissions shall not exceed 0.0054 pound per million BTU and 0.28 ton per year.

Applicable Compliance Method:

Compliance with the short-term emissions limitation shall be based upon the emissions factor for VOC from AP-42, Table 1.4-2 (7/98) for small boilers.

Effective Date: To be entered upon final issuance

If required, VOC emissions shall be determined according to test Methods 1 - 4 and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be demonstrated by the following calculation:

$$E = (M_f \times EF \times 8,760 \text{ hours/yr}) / 2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons per year;

M_f = 12 million BTU/hr; the maximum natural gas fuel input capacity; and

EF = 0.0054 lb VOC/million BTU; VOC emission factor from AP-42 Table 1.4-2 (7/98) for small boilers.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

f. Emissions Limitations:

Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six-minute average, at any time.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

[OAC rule 3745-17-07(A)]

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute" in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI or PTIO.

[ORC 3704.03(F)(4)(b)]

4. Emissions Unit Group -Chlorine degassing units: P043,P044,P045,P046

EU ID	Operations, Property and/or Equipment Description
P043	Chlorine Degassing System #2
P044	Chlorine Degassing System #3
P045	Chlorine Degassing System #4
P046	Chlorine Degassing System #5

2.08 tons per hour single-chamber chlorine degassing units (in-line fluxers) at the Newport Rolling Mill controlled with a lime injected baghouse; maximum chlorine injection rate of five standard cubic feet per hour per unit and a maximum throughput of 18,250 tons of aluminum per year per unit

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - (1) g)(1)
- 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 11/30/01	The requirements of this rule include compliance with the requirements of 40 CFR Part 63, Subpart RRR. Particulate emissions (PE), PM ₁₀ , and PM _{2.5} emissions shall not exceed 0.09 ton per year. See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/1/06	See b)(2)b. below.
c.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six-minute average, at any time.

Effective Date: To be entered upon final issuance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-11(B)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 63, Subpart RRR.
e.	<p>40 CFR Part 63, Subpart RRR (40 CFR 63.1500-1520)</p> <p>[In accordance with 40 CFR 63.1500(a) and (b)(8), this emissions unit is a new in-line fluxer constructed or reconstructed after February 11, 1999 at a secondary aluminum production facility subject to the emissions limitations and control measures specified in this section.]</p>	<p>The owner or operator of an in-line fluxer must use the limits in this paragraph to determine the emission standards for a SAPU.</p> <p>0.02 kg of HCl per Mg (0.04 lb of HCl per ton) of feed/charge; and 0.005 kg of PM per Mg (0.01 lb of PM per ton) of feed/charge. [40 CFR 63.1505(j)]</p> <p>See b)(2)c. below.</p>
f.	40 CFR 63.1-19 (40 CFR 63.1518)	Appendix A to Subpart RRR of 40 CFR Part 63 – General Provisions Applicability to Subpart RRR, specifies the provisions of Subpart A that apply to owners and operators of affected facilities subject to this subpart.

(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.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

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.

Effective Date: To be entered upon final issuance

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate from this air contaminant source since the uncontrolled potential to emit for particulate is less than 10 tons/yr.

[OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06]

- c. The owner or operator of a new affected source that commences construction or reconstruction after February 11, 1999 must comply with the requirements of this subpart by March 24, 2000 or upon startup, whichever is later.

[40 CFR 63.1501(b)]

c) Operational Restrictions

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

63.1506(b)	Labeling of each in-line fluxer
63.1506(c)	Emission capture and collection; OM&M plan procedures
63.1506(d)	Measurement of feed charge weight
63.1506(k)	Lime injected baghouse operating requirements
63.1506(p)	Corrective action for operating parameter deviations

d) Monitoring and/or Recordkeeping Requirements

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

63.1510(a)	Monitoring of control equipment and processes after initial performance test required
63.1510(b)	Operation, maintenance, and monitoring (OM&M) plan requirements
63.1510(c)	Label inspections
63.1510(d)	Installation, operation, maintenance and inspections of capture/collection system
63.1510(e)	Installation, calibration, operation and maintenance of device to measure and

Effective Date: To be entered upon final issuance

	record the total weight of feed/charge to, or the aluminum production from, the emission unit
63.1510(f)	Bag leak detection system requirements
63.1510(i)(1)	Verification that lime is free-flowing in continuous lime injection system
63.1510(i)(2)	Daily recording of the lime feeder setting for continuous lime injection system
63.1510(j)	Total reactive flux injection rate
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)	Additional general recordkeeping requirements for owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit)

e) Reporting Requirements

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

63.1510(b)	Submittal of OM&M plan
63.1515(a)	Initial notifications
63.1511(b), 63.1512(q), 63.1512(r), 63.1512(s) and 63.1515(b)	Notification of compliance status report after initial performance test
63.1516(a)	Startup, shutdown, and malfunction plan/reports
63.1516(b)	Semi-annual excess emissions/summary reports

Effective Date: To be entered upon final issuance

63.1516(c)	Annual certifications of continuing compliance
------------	--

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:
PE, PM₁₀, and PM_{2.5} emissions shall not exceed 0.09 ton per year.

Applicable Compliance Method:
Compliance with the annual emissions limitation shall be demonstrated based upon the following equation:

$$E = M \times EF / 2,000 \text{ lbs/ton}$$

where:

E = the emission rate, in tons per year;
M = the aluminum production rate, in tons per year; and
EF = the most recent emission factor for PE, in pounds of pollutant per ton of aluminum produced, determined from the most recent emissions test.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

b. Emissions Limitations:
Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six-minute average, at any time.

Applicable Compliance Method:
If required, visible particulate emissions shall be determined according to USEPA Method 9.

[OAC rule 3745-17-07(A)]

c. Emissions Limitations:
The owner or operator of an in-line fluxer must use the limits in this paragraph to determine the emission standards for a SAPU.

0.02 kg of HCl per Mg (0.04 lb of HCl per ton) of feed/charge; and
0.005 kg of PM per Mg (0.01 lb of PM per ton) of feed/charge.

Effective Date: To be entered upon final issuance

Applicable Compliance Method:

Compliance shall be demonstrated based upon the testing requirements specified in f)(2).

[40 CFR 63.1505(j)]

(2) Performance testing shall be conducted as required in 40 CFR Part 63, Subpart RRR pursuant to 40 CFR 63.1511, 63.1512 and Subpart A of 40 CFR Part 63. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. Except as provided in f)(2)l. below, the emission testing to demonstrate compliance with the limits of 40 CFR Part 63, Subpart RRR shall be conducted within 90 days of the compliance date in 40 CFR 63.1501(b) and every five years following the initial performance test.

[40 CFR 63.1511(b) and 40 CFR 63.1511(e)]

b. The emissions testing shall be conducted to demonstrate compliance with the emission limitations specified in b)(1)f. of this permit, and in accordance with the requirements of 40 CFR Part 63.1511.

[40 CFR 63.1511(b)]

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

For PM, Methods 1-5 of 40 CFR Part 60, Appendix A

For HCl, Methods 1-4 and 26 or 26A of 40 CFR Part 60, Appendix A

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

[40 CFR 63.1511(c) and (d)]

d. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest melt rate achievable for the materials charged at the time of the test with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

[40 CFR 63.1511(b)(1)]

e. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

[40 CFR 63.1511(b)(2)]

Effective Date: To be entered upon final issuance

- f. 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.

[40 CFR 63.1511(b)(3)]

- g. Where multiple affected sources or emissions units are exhausted through a common stack, pollutant sampling for each run must be conducted over a period of time during which all affected sources or emissions units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter.

[40 CFR 63.1511(b)(4)]

- h. Initial compliance with an applicable emission limit or standard is demonstrated if the average of three runs conducted during the performance test is less than or equal to the applicable emission limit or standard.

[40 CFR 63.1511(b)(5)]

- i. The owner or operator of new or existing affected sources and emission units 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 that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, the owner or operator 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. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

- i. The complete emission test report(s) used as the basis of the parameter(s) is submitted.
- ii. The same test methods and procedures as required by this subpart were used in the test.
- iii. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.
- iv. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

[40 CFR 63.1511(g)]

- j. Prior to conducting a performance test required by this section, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c). In addition, no later than thirty (30) days prior to the proposed test date(s), the permittee shall submit an "Intent to Test"

Effective Date: To be entered upon final issuance

notification to the Ohio EPA, Southeast 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, Southeast District Office's refusal to accept the results of the emissions test(s).

[40 CFR 63.1511(a)]

- k. The owner or operator must conduct performance tests to measure emissions of PM and HCl at the outlet of the control device.

[40 CFR 63.1512(h)(1)]

- l. The owner or operator may choose to determine the rate at which reactive chlorine flux is added to an in-line fluxer and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all chlorine in the reactive flux added to the in-line fluxer is emitted as HCl. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

[40 CFR 63.1512(h)(2)]

- m. The owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must measure (or otherwise determine) and record the total weight of feed/charge to the affected source or emission unit for each of the three test runs and calculate and record the total weight. An owner or operator that chooses to demonstrate compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emission unit or affected source instead of the feed/charge weight.

[40 CFR 63.1512(k)]

- n. The owner or operator must use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate.
 - i. Continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15 minute period during the HCl tests, determine and record the 15-minute block average weights, and calculate and record the total weight of the gaseous or liquid reactive flux for the 3 test runs;
 - ii. Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;
 - iii. Determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5.

Effective Date: To be entered upon final issuance

- iv. Divide the weight of total chlorine usage (W_t) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and
- v. If a solid reactive flux other than magnesium chloride is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

[40 CFR 63.1512(o)]

- o. The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl tests to establish an operating parameter value for the feeder setting for each operating cycle or time period used in the performance test.
 - i. For continuous lime injection systems, ensure that lime in the feed hopper or silo is free-flowing at all times; and
 - ii. Record the feeder setting for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

[40 CFR 63.1512(p)]

- p. Use the following equation to determine compliance with an emission limit for PM and HCl:

$$E = \{C \times Q \times Ka\} / \{P\}$$

Where:

E = Emission rate of PM or HCl, kg/Mg (lb/ton) of feed;
C = Concentration of PM or HCl, g/dscm (gr/dscf);
Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);
Ka = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr); and
P = Production rate, Mg/hr (ton/hr).

[40 CFR 63.1513(b)]

- q. Personnel from the Ohio EPA, Southeast 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.

[OAC rule 3745-77-07(C)(1)]

- r. 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 the Ohio EPA, Southeast District Office within 60 days following completion of test(s). The permittee may request additional time for the

submission of the written report, where warranted, with prior approval from the Ohio EPA, Southeast District Office.

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute" in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI or PTIO.

[ORC 3704.03(F)(4)(b)]

Effective Date: To be entered upon final issuance

5. Emissions Unit Group -Holding furnaces: P041,P042

EU ID	Operations, Property and/or Equipment Description
P041	Holder #3
P042	Holder #4

6.25 tons per hour, nine million BTU per hour natural gas-fired reverberatory Group 2 aluminum holding furnaces at the Newport Rolling Mill; maximum throughput of 54,750 tons of aluminum per year per furnace and no reactive chlorine flux injection

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) g)(1)

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 11/30/01	<p>Particulate emissions (PE), emissions of particulate matter less than 10 microns (PM₁₀) and emissions of particulate matter less than 2.5 microns (PM_{2.5}) shall not exceed 0.0075 pound per million BTU and 0.29 ton per year.</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 0.049 pound per million BTU and 1.93 tons per year.</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.082 pound per million BTU and 3.25 tons per year.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 0.0006 pound per million BTU and 0.023 ton per year.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 0.0054 pound per million BTU and 0.21 ton per year.</p>

Effective Date:To be entered upon final issuance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>The requirements of this rule include compliance with 40 CFR Part 63, Subpart RRR.</p> <p>See b)(2)a. below.</p>
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/1/06	See b)(2)b. below.
	OAC rule 3745-17-07(A)	See b)(2)c. below.
	OAC rule 3745-17-11(B)(2)	See b)(2)d. below.
	OAC rule 3745-18-06(E)(2)	<p>SO₂ emissions shall not exceed 102.4 pounds per hour.</p> <p>This emissions limitation is less stringent than the limitation listed under OAC rule 3745-31-05(A)(3), until such time as U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan.</p>
	<p>40 CFR Part 63, Subpart RRR (40 CFR 63.1500-1520)</p> <p>[In accordance with 40 CFR 63.1500(a) and (b)(4), this emissions unit is a new group 2 furnace constructed or reconstructed after February 11, 1999 at a secondary aluminum production facility subject to the emissions limitations and control measures specified in this section.]</p>	See b)(2)e. below.
	40 CFR 63.1-19 (40 CFR 63.1518)	Appendix A to Subpart RRR of 40 CFR Part 63 – General Provisions Applicability to Subpart RRR, specifies the provisions of Subpart A that apply to owners and operators of affected facilities subject to this subpart.

(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

Effective Date: To be entered upon final issuance

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.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

- 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 particulate, NO_x, CO, SO₂ and VOC emissions from this air contaminant source since the uncontrolled potential to emit for PE, NO_x, CO, SO₂ and VOC is less than 10 tons/yr.

[OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06]

- c. The uncontrolled mass rate of emissions (UMRE) for particulate matter from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II does not apply to this emissions unit.
- d. Since the mass emission limitation for particulate in OAC rule 3745-17-11(B)(2) is not applicable, the opacity limits in OAC rule 3745-17-07 are also not applicable pursuant to OAC rule 3745-17-07(A)(3)(h).
- e. The owner or operator of a new affected source that commences construction or reconstruction after February 11, 1999 must comply with the requirements of this subpart by March 24, 2000 or upon startup, whichever is later.

[40 CFR 63.1501(b)]

c) Operational Restrictions

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

63.1506(b)	Labeling of each group 2 furnace
63.1506(o)(1)	Operate each furnace using only clean charge as the feedstock
63.1506(o)(2)	Operate each furnace using no reactive flux

- (2) The permittee shall burn only natural gas in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

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

Effective Date: To be entered upon final issuance

63.1510(b)	Operation, maintenance, and monitoring (OM&M) plan requirements
63.1510(c)	Label inspections
63.1510(r)(1)	Recordkeeping for materials charged to each furnace
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)	Additional general recordkeeping requirements for owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit)

- (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.

e) Reporting Requirements

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

63.1510(b)	Submittal of OM&M plan
63.1510(r)(2)	Certify compliance with charge material operational standards
63.1515(a)	Initial notifications
63.1512(r) and 63.1515(b)	Notification of compliance status report after initial performance test
63.1516(b)	Semi-annual excess emissions/summary reports
63.1516(c)	Annual certifications of continuing compliance

Effective Date: To be entered upon final issuance

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

f) Testing Requirements

- (1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitations:

PE and emissions of PM₁₀ and PM_{2.5} shall not exceed 0.0075 pound per million BTU and 0.29 ton per year.

Applicable Compliance Method:

Compliance with the short-term emissions limitation shall be based upon the emissions factor for total PM from AP-42, Table 1.4-2 (7/98) for small boilers.

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be demonstrated by the following calculation:

$$E = (M_f \times EF \times 8,760 \text{ hours/yr}) / 2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons per year;

M_f = 9 million BTU/hr; the maximum natural gas fuel input capacity; and

EF = 0.0075 lb PM/million BTU; total PM emission factor from AP-42 Table 1.4-2 (7/98) for small boilers.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

b. Emissions Limitations:

NO_x emissions shall not exceed 0.049 pound per million BTU and 1.93 tons per year.

Applicable Compliance Method:

Compliance with the short-term emissions limitation shall be based upon the emissions factor for NO_x from AP-42, Table 1.4-1 (7/98) for small boilers controlled with low-NO_x burners.

If required, NO_x emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Effective Date: To be entered upon final issuance

Compliance with the annual emissions limitation shall be demonstrated by the following calculation:

$$E = (M_f \times EF \times 8,760 \text{ hours/yr}) / 2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons per year;
M_f = 9 million BTU/hr; the maximum natural gas fuel input capacity; and
EF = 0.049 lbNO_x/million BTU; NO_x emission factor from AP-42 Table 1.4-1 (7/98) for small boilers controlled with low-NO_x burners.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

c. Emissions Limitations:

CO emissions shall not exceed 0.082 pound per million BTU and 3.25 tons per year.

Applicable Compliance Method:

Compliance with the short-term emissions limitation shall be based upon the emissions factor for CO from AP-42, Table 1.4-1 (7/98) for small boilers.

If required, CO emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be demonstrated by the following calculation:

$$E = (M_f \times EF \times 8,760 \text{ hours/yr}) / 2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons per year;
M_f = 9 million BTU/hr; the maximum natural gas fuel input capacity; and
EF = 0.082 lb CO/million BTU; CO emission factor from AP-42 Table 1.4-1 (7/98) for small boilers.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

d. Emissions Limitations:

SO₂ emissions shall not exceed 0.0006 pound per million BTU and 0.023 ton per year.

SO₂ emissions shall not exceed 102.4 pounds per hour.

Applicable Compliance Method:

Compliance with the short-term emissions limitations shall be based upon the emissions factor for SO₂ from AP-42, Table 1.4-2 (7/98) for small boilers.

Effective Date: To be entered upon final issuance

Compliance with the pound per hour emissions limitation shall be demonstrated by the following calculation:

$$\begin{aligned} \text{SO}_2 \text{ (lbs/hr)} &= (\text{SO}_2 \text{ emission factor X maximum hourly fuel input capacity}) \\ &= (0.0006 \text{ lb/ton X 9 million BTU/hr}) \\ &= 0.0054 \text{ lb/hr} \end{aligned}$$

If required, SO₂ emissions shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be demonstrated by the following calculation:

$$E = (M_f \times EF \times 8,760 \text{ hours/yr}) / 2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons per year;

M_f = 9 million BTU/hr; the maximum natural gas fuel input capacity; and

EF = 0.0006 lb SO₂/million BTU; SO₂ emission factor from AP-42 Table 1.4-2 (7/98) for small boilers.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

e. Emissions Limitations:

VOC emissions shall not exceed 0.0054 pound per million BTU and 0.21 ton per year.

Applicable Compliance Method:

Compliance with the short-term emissions limitations shall be based upon the emissions factor for VOC from AP-42, Table 1.4-2 (7/98) for small boilers.

If required, VOC emissions shall be determined according to test Methods 1 - 4 and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be demonstrated by the following calculation:

$$E = (M_f \times EF \times 8,760 \text{ hours/yr}) / 2,000 \text{ lbs}$$

Where:

E = the emission rate, in tons per year;

M_f = 9 million BTU/hr; the maximum natural gas fuel input capacity; and

EF = 0.0054 lb VOC/million BTU; VOC emission factor from AP-42 Table 1.4-2 (7/98) for small boilers.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute" in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI or PTIO.

[ORC 3704.03(F)(4)(b)]