



Environmental Protection Agency

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

7/3/2012

Greg Butler
B & C Castings Inc.
842 NORTON AVE
BARBERTON, OH 44203

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1677020154
Permit Number: P0109672
Permit Type: Initial Installation
County: Summit

Certified Mail

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

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Akron Regional Air Quality Management District at (330)375-2480 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: ARAQMD



Response to Comments

| | |
|---|--|
| Facility ID: | 1677020154 |
| Facility Name: | B & C Castings Inc. |
| Facility Description: | Motor Vehicle Supplies and New Parts. |
| Facility Address: | 842 NORTON AVE Barberton, OH 44203 Summit County |
| Permit: | P0109672, Permit-To-Install and Operate - Initial Installation |
| A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the Akron Beacon Journal on 06/01/2012. The comment period ended on 07/01/2012. | |
| Hearing date (if held) | |
| Hearing Public Notice Date (if different from draft public notice) | |

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

1. Topic: None
 - a. Comment: None
 - b. Response: None

NO COMMENTS RECEIVED.



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
B & C Castings Inc.**

| | |
|----------------|----------------------|
| Facility ID: | 1677020154 |
| Permit Number: | P0109672 |
| Permit Type: | Initial Installation |
| Issued: | 7/3/2012 |
| Effective: | 7/3/2012 |
| Expiration: | 7/3/2017 |



Division of Air Pollution Control
Permit-to-Install and Operate

for
B & C Castings Inc.

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Authorization

Facility ID: 1677020154
Application Number(s): A0044013
Permit Number: P0109672
Permit Description: Installation of equipment to melt, cast and heat treat 6061 aluminum alloy ingots.
Permit Type: Initial Installation
Permit Fee: \$7,000.00
Issue Date: 7/3/2012
Effective Date: 7/3/2012
Expiration Date: 7/3/2017
Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

B & C Castings Inc.
842 NORTON AVE
Barberton, OH 44203

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

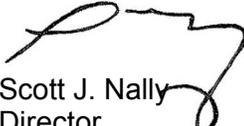
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Akron Regional Air Quality Management District
146 South High Street, Room 904
Akron, OH 44308
(330)375-2480

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Scott J. Nally
Director



Authorization (continued)

Permit Number: P0109672

Permit Description: Installation of equipment to melt, cast and heat treat 6061 aluminum alloy ingots.

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

| | |
|-----------------------------------|----------------------|
| Emissions Unit ID: | P003 |
| Company Equipment ID: | Homogenizing Furnace |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |

| | |
|-----------------------------------|----------------|
| Emissions Unit ID: | P901 |
| Company Equipment ID: | CMF1 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |

Group Name: In-line degassers

| | |
|-----------------------------------|------------------------|
| Emissions Unit ID: | F001 |
| Company Equipment ID: | In line degassing unit |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | F002 |
| Company Equipment ID: | In line degassing unit |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |

A. Standard Terms and Conditions

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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

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

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

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

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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

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

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

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

¹ Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile 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).

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

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

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

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

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

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

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.
2. B & C Castings Inc., located at 842 Norton Avenue, Barberton, Summit County, OH 44203, is a secondary aluminum production facility 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.
3. Per 40 CFR Part 63, Subpart RRR, § 63.1500 Applicability, the requirements of Subpart RRR apply to the owner or operator of each secondary aluminum production facility. As defined in § 63.1503 Definitions, a *secondary aluminum production facility* means any establishment using *clean charge*, *aluminum scrap*, or dross from aluminum production, as the raw material and performing one or more of the following processes: scrap shredding, scrap drying/delacquering/decoating, thermal chip drying, furnace operations (*i.e.*, melting, holding, sweating, refining, fluxing, or alloying), recovery of aluminum from dross, in-line fluxing, or dross cooling.
4. This facility is an Area Source of hazardous air pollutants (HAP) as defined in § 63.2 of 40 CFR Part 63, Subpart A. Per § 63.1500 (c) Applicability, the requirements of Subpart RRR pertaining to dioxin and furan emissions and associated operating, monitoring, reporting and recordkeeping apply to the following affected sources located at a facility that is an area source of HAP as defined in § 63.2:
 - a) Each new and existing thermal chip dryer;
 - b) Each new and existing scrap dryer/delacquering kiln/decoating kiln;
 - c) Each new and existing sweat furnace;
 - d) Each new and existing secondary aluminum processing unit, containing one or more group 1 furnace emission units processing other than clean charge.
5. Per § 63.1503 Definitions, 40 CFR Part 63, Subpart RRR, emissions unit P901 HDC Melting Furnace is a *Group 1 furnace using reactive flux* and constitutes a new *secondary aluminum processing unit (SAPU)*. A new *SAPU* means any combination of individual *group 1 furnaces* and *in-line fluxers* within a *secondary aluminum processing facility* which either were constructed or reconstructed after February 11, 1999, or have been permanently redesignated as new emission units pursuant to §63.1505(k)(6). Each of the *group 1 furnaces* or *in-line fluxers* within a new *SAPU* is considered an *emission unit* within that *secondary aluminum processing unit*. This facility has one Group 1 furnace, which alone constitutes a SAPU. This facility also has two in-line fluxers. These emission units are not subject to Subpart RRR because there are no Subpart RRR requirements pertaining to in-line fluxers without emission controls located at a facility that is an area source of HAP.

C. Emissions Unit Terms and Conditions

1. P003, Homogenizing Furnace

Operations, Property and/or Equipment Description:

Installation of a natural gas-fired, heat treat furnace at a secondary aluminum production facility that is an area source of hazardous air pollutant (HAP) emissions. The heat treat furnace is operated on a continuous operation basis to homogenize the crystalline structure of the sized casted metal ingots prior to further processing. Maximum ingot heat treat capacity 15,000 pounds per hour. Maximum heat input capacity 7.063 million Btu per hour. Emissions from the heat treat furnace are generated from natural gas combustion and the homogenizing process using ammonium fluoroborate (AFB). The emissions are uncontrolled and released to the atmosphere through a single exhaust stack. The reaction of AFB with atmospheric moisture produces hydrogen fluoride (HF), a hazardous air pollutant (HAP) as defined in § 63.2 of 40 CFR Part 63, Subpart A. This emissions unit will employ federally enforceable restrictions on AFB usage to limit potential HF emissions below 10 tons per year in order to maintain this facility as an area source of HAP emissions.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

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

a. d)(5) through (8) and e)(6).

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

a. None.

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 | Nitrogen oxides (NOx)emissions from the stack shall not exceed 0.70 pound per hour and 3.1 tons per year; and Carbon monoxide (CO)emissions from the stack shall not exceed 0.60 pound per hour and 2.6 tons per year. The requirements of OAC rule 3745-31- |

Final Permit-to-Install and Operate

B & C Castings Inc.

Permit Number: P0109672**Facility ID:** 1677020154**Effective Date:** 7/3/2012

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|---|
| | | 05(A)(3)(a) also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B), 3745-18-06(E)(1), and 3745-31-05(D). See b)(2)(a) and b)(2)(c). |
| b. | OAC rule 3745-31-05(A)(3), as effective 12/01/06 | See b)(2)(d). |
| c. | OAC rule 3745-17-07(A)(1) | Visible particulate emissions (PE) from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by rule. |
| d. | OAC rule 3745-17-11(B) | PE shall not exceed 15.8 pounds per hour (from Table I, and a process weight at maximum capacity of 7.5 tons per hour; Figure II is not applicable because the uncontrolled mass rate of emission is less than 10 pounds per hour.) See b)(2)a. |
| e. | OAC rule 3745-18-06(E)(1) | Sulfur dioxide (SO ₂) emissions shall not exceed 77.1 pounds per hour. |
| f. | OAC rule 3745-31-05(D) | See b)(2)(e) and c)(2). |
| g. | OAC rule 3745-114-01 ORC 3704.03(F)(3)(c) and F(4) | See d)(5) through (8) and e)(6). |

(2) Additional Terms and Conditions

- a. The NO_x and CO emission limitations established pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/01, the SO₂ emission limitation from OAC rule 3745-18-06(E)(1) and the PE limitation from OAC rule 3745-17-11(B) are equal to or greater than the potentials to emit for this emissions unit. Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure ongoing compliance with these emission limitations.
- b. The permittee shall apply for and, if required, obtain a modification to this permit or obtain a new final permit-to-install and operate (PTIO) prior to making any change to equipment, change in the metal being processed, change in homogenizing agent and/or the rate of its usage, change in process capacity, change in the fuel type or heat input rate, or any change in the method of operation that results in an increase in the allowable emissions or results in an increase in emissions of greater than the de minimis levels in OAC rule 3745-15-05 of any type of air contaminant not previously emitted.
- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 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 the Ohio Revised Code

(ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) 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 revisions 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 the emission limitations for NOx and CO established pursuant to OAC rule 3745-31-05(A)(3) no longer apply.

- d. The following rule paragraphs apply once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan:

The requirements of OAC rule 3745-31-05(A)(3)(a) also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B), 3745-18-06(E)(1) and 3745-31-05(D).

The "Best Available Technology (BAT)" requirements under OAC rule 3745-31-05(A)(3)(a) are not applicable to the particulate emissions (PE) emitted from this emissions unit. BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also referred to as total suspended particulate or particulate matter) is an air contaminant without an established NAAQS.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the NOx and CO emissions from this air contaminant source since the uncontrolled potential to emit for NOx and CO is each less than 10 tons/year.

- e. The emissions of hydrogen fluoride (HF) from this emissions unit shall not exceed 9.79 tons per year, based upon a rolling, 12-month summation of the monthly emissions. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

| Month(s) | Maximum Allowable Cumulative Emissions of HF (Tons) |
|----------|---|
| 1 | 0.816 |
| 1-2 | 1.63 |
| 1-3 | 2.44 |
| 1-4 | 3.26 |
| 1-5 | 4.08 |
| 1-6 | 4.89 |

| | |
|------|------|
| 1-7 | 5.71 |
| 1-8 | 6.53 |
| 1-9 | 7.34 |
| 1-10 | 8.16 |
| 1-11 | 8.98 |
| 1-12 | 9.79 |

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual emission limitation for HF shall be based upon a rolling, 12-month summation of the monthly emissions.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.
- (2) The maximum annual ammonium fluoroborate (AFB) usage rate for this emissions unit shall not exceed 26,280 pounds, based upon a rolling, 12-month summation of the monthly AFB usage rates.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the AFB usage levels, in pounds, specified in the following table:

| Month | Maximum Allowable Cumulative AFB usage |
|-------|---|
| 1 | 2,190 |
| 1-2 | 4,380 |
| 1-3 | 6,570 |
| 1-4 | 8,760 |
| 1-5 | 10,950 |
| 1-6 | 13,140 |
| 1-7 | 15,330 |
| 1-8 | 17,520 |
| 1-9 | 19,710 |
| 1-10 | 21,900 |

1-11 24,090

1-12 26,280

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual AFB usage rate limitation shall be based upon a rolling, 12-month summation of the monthly AFB usage rates.

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, as well as the reason(s) an alternative fuel was burned.
- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when weather conditions allow, for any visible particulate emissions from the stack(s) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. identify the location, i.e., stack, and color of the visible emissions;
 - b. whether the visible emissions are representative of normal operations;
 - c. if the visible emissions are not representative of normal operations, the cause of the abnormal visible emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

- (3) The permittee shall maintain monthly production records of the following information for this emissions unit:
 - a. the ammonium fluoroborate (AFB) usage, in pounds, for each month; and
 - b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the monthly AFB usage rates, in pounds per year.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative AFB usage rate, in pounds, for each calendar month.

- (4) The permittee shall maintain monthly emissions records of the following information for this emissions unit:
- a. the hydrogen fluoride(HF)emissions, in tons, for each month of operations; and
 - b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the HFemissions, in tons per year.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative HF emissions, in tons, for each calendar month.

- (5) The federally enforceable permit-to-install and operate (FEPTIO)application for this/these emissions unit(s), P003, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
 - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., “X” hours per day and “Y” days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or “worst case” toxic contaminant(s):

Toxic Contaminant: hydrogen fluoridew/ option* to list all toxics, covered under the worst-case toxic modeled.

TLV (mg/m3): 2.3(*for which toxic, if using worst case)

Maximum Hourly Emission Rate (lbs/hr): 2.23(*for which toxic, if using worst case)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.23

MAGLC (ug/m3): 54.8

The permittee, has demonstrated that emissions of hydrogen fluoride, from emissions unit(s) P003, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F).

- (6) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the “Toxic Air Contaminant Statute” will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or

process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final FEPTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (7) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- (8) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

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.
- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness

Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

- (4) The permittee shall also identify the following information in the annual PER:
- a. all instances during which any visible particulate emissions were observed from any stack, including identification of the stack(s), serving this emissions unit;
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions; and
 - c. each day when a fuel other than natural gas was burned in this emissions unit.
- (5) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations and/or operational restrictions that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling, 12-month ammonium fluoroborate (AFB) usage rate limitation; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative AFB usage rate levels; and
 - ii. all exceedances of the rolling, 12-month emission limitation for any individual HAP and, for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels for any individual HAP.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

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

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (6) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum

ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

f) Testing Requirements

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

a. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

PE shall not exceed 15.8 pounds per hour.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the requirements in 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03(B)(10).

c. Emission Limitation:

NOx emissions from the stack shall not exceed 0.70 pound per hour and 3.1 tons per year.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 7E.

d. Emission Limitation:

CO emissions from the stack shall not exceed 0.60 pound per hour and 2.6 tons per year.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 10.

e. Emission Limitation:

HF emissions from this emissions unit shall not exceed 9.79 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with this emissions limit shall be based upon the monitoring and record keeping requirements of term d)(4) above.

f. Emission Limitation:

SO₂ emissions shall not exceed 77.1 pounds per hour.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 6.

g) Miscellaneous Requirements

(1) None.

2. P901, (CMF1) HDC Continuous Melting Furnace

Operations, Property and/or Equipment Description:

Installation of a natural gas-fired, aluminum alloy reverberatory furnace, with an integral scrap chips feed/molten metal recirculation vortex mixer, at a secondary aluminum production facility that is an area source of hazardous air pollutant (HAP) emissions. The melting furnace is operated on a continuous operation basis to melt aluminum alloy chips and solids. Maximum melt production capacity 15,000 pounds per hour. Total furnace maximum heat input capacity 18.8 million Btu per hour (17.1 million Btu per hour maximum heat input capacity for the melting chamber, 1.7 million Btu per hour maximum heat input capacity for the casting chamber, and no active heating of the preheat chamber). Emissions from the melting furnace are generated from oxidation of molten metal, natural gas combustion and reactive fluxing with potassium chloride and magnesium chloride salts. The emissions are uncontrolled and released to the atmosphere through two separate exhaust stacks. Fugitive emissions may be released during feeding of scrap raw materials into the furnace and molten metal production exiting the furnace.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

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

a. None.

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

a. None.

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 | Stack Emissions: Emissions of particulate matter less than 10 microns (PM ₁₀) shall not exceed 8.86 pounds per hour and 38.8 tons per year; Nitrogen oxides (NOx) emissions shall not exceed 2.00 pounds per hour and 8.76 tons per year; |

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| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|--|
| | | <p>Carbon monoxide (CO)emissions shall not exceed 1.60 pounds per hour and 7.01 tons per year; and</p> <p>Volatile organic compound (VOC) emissions shall not exceed 1.30 pounds per hour and 5.69 tons per year.</p> <p>The requirements of OAC rule 3745-31-05(A)(3)(a)also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), 3745-17-08(B), 3745-17-11(B) and 3745-18-06(E)(1); and 40 CFR Part 63,Subpart A and 40 CFR Part 63, Subpart RRR.</p> <p>See b)(2)(a) and b)(2)(c).</p> |
| b. | OAC rule 3745-31-05(A)), as effective 12/01/06 | See b)(2)(d). |
| c. | OAC rule 3745-17-07(A)(1) | Visible particulate emissions (PE) from each stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by rule. |
| d. | OAC rule 3745-17-07(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08) | Visible PE from fugitive dust shall not exceed 20% opacity, as a 3-minute average. |
| e. | OAC rule 3745-17-08(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08) | The permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. |
| f. | OAC rule 3745-17-11(B) | PE shall not exceed 15.8 pounds per hour (from Table I, and a process weight at maximum capacity of 7.5 tons per hour; Figure II is not applicable because the uncontrolled mass rate of emission is less than 10 pounds per hour.) See b)(2)a. |
| g. | OAC rule 3745-18-06(E)(1) | Sulfur dioxide (SO ₂) emissions shall not exceed 77.1 pounds per hour. |
| h. | 40 CFR Part 63, Subpart RRR (40 CFR 63.1500-1520) | Per § 63.1500(a), the requirements of this subpart apply to the owner or operator of each secondary aluminum production facility as defined in §63.1503. |

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| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|-------------------------------|---|
| | | <p>Per § 63.1501(b), except as provided in paragraph (c) of this section, 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.</p> <p>Per § 63.1503, emissions unit P901 is a <i>group 1 furnace</i> within a new <i>secondary aluminum processing unit (SAPU)</i>, which also includes two in-line fluxers, emissions units F001 and F002.</p> <p>Per § 63.1505(a), the owner or operator of a new or existing affected source must comply with each applicable limit in this section. Table 1 to this subpart summarizes the emission standards for each type of source.</p> <p>Per § 63.1505(i)(3) and Table 1 to Subpart RRR of Part 63, the owner or operator of a group 1 furnace must comply with the following emissions limit:</p> <p>15 µg of D/F TEQ per Mg (2.1×10^{-4}gr of D/F TEQ per ton) of feed/charge from a group 1 furnace at a secondary aluminum production facility that is a major or area source. This limit does not apply if the furnace processes only clean charge.</p> <p>See b)(2)(e) and (f).</p> |
| i. | 40 CFR Part 63, Subpart A | Appendix A to Subpart RRR of Part 63 shows which parts of the General Provisions in §§63.1 through 63.15 are applicable to Subpart RRR. The complete 40 CFR Part 63 requirements, including the General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov . |

(2) Additional Terms and Conditions

- a. The PM₁₀, NO_x, CO and VOC emissions limits established pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/01, the PM₁₀ emissions limits established pursuant to OAC rule 3745-31-05(A), as effective 12/01/06, the SO₂ emissions limit from OAC rule 3745-18-06(E)(1) and the PE limit from OAC rule 3745-17-11(B) are equal to or greater than the potentials to emit for this emissions unit. Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure ongoing compliance with these emissions limitations.
- b. The permittee shall apply for and, if required, obtain a modification to this permit or obtain a new final permit-to-install and operate (PTIO) prior to making any change to equipment, change in the charge materials and/or charge capacity, change in the fuel type or heat input rate, or any change in the method of operation that results in an increase in the allowable emissions or results in an increase in emissions of greater than the de minimis levels in OAC rule 3745-15-05 of any type of air contaminant not previously emitted.
- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 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 the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) 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 revisions 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 the emission limitations for NO_x, CO and VOC established pursuant to OAC rule 3745-31-05(A)(3) no longer apply.

- d. The following rule paragraphs apply once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan:

Emissions of particulate matter less than 10 microns (PM₁₀) shall not exceed 8.86 pounds per hour and 38.8 tons per year.

The requirements of OAC rule 3745-31-05(A)(3)(a) also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), 3745-17-08(B), 3745-17-11(B) and 3745-18-06(E)(1); and 40 CFR Part 63, Subpart A and 40 CFR Part 63, Subpart RRR.

The "Best Available Technology (BAT)" requirements under OAC rule 3745-31-05(A)(3)(a) are not applicable to the particulate emissions (PE) emitted from this emissions unit. BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also

referred to as total suspended particulate or particulate matter) is an air contaminant without an established NAAQS.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO_x, SO₂, VOC and CO emissions from this air contaminant source since the uncontrolled potential to emit for NO_x, SO₂, VOC and CO is each less than 10 tons/year.

- e. Per § 63.1500(c), the requirements of this subpart pertaining to dioxin and furan (D/F) emissions and associated operating, monitoring, reporting and recordkeeping requirements apply to the following affected sources, located at a secondary aluminum production facility that is an area source of HAPs as defined in §63.2:

Each new and existing secondary aluminum processing unit, containing one or more group 1 furnace emission units processing other than clean charge.

- f. Per § 63.1505(i)(6), the owner or operator may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed/charge.
- g. Per § 63.1506(a)(1) and Table 2 to this subpart, on and after the compliance date established by §63.1501, the owner or operator must operate all new and existing affected sources and control equipment according to the requirements in this section.
- h. Per § 63.1506(b) *Labeling*, the owner or operator must provide and maintain easily visible labels posted at each group 1 furnace and in-line fluxer that identifies the applicable emission limits and means of compliance, including:
 - i. The type of affected source or emission unit (e.g., group 1 furnace or in-line fluxer).
 - ii. The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g. ., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.
- i. Per § 63.1506(d) *Feed/charge weight*, the owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge must:
 - i. Except as provided in paragraph (d)(3) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and
 - ii. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

- iii. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:
 - (a) The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and
 - (b) All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

- j. Per § 63.1506(n) *Group 1 furnace without add-on air pollution control devices*, the owner or operator of a group 1 furnace (including a group 1 furnace that is part of a secondary aluminum processing unit) without add-on air pollution control devices must:
 - i. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
 - ii. Operate each furnace in accordance with the work practice/pollution prevention measures documented in the OM&M plan and within the parameter values or ranges established in the OM&M plan.

- k. Per § 63.1506(p) *Corrective action*, when a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

- 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, as well as the reason(s) an alternative fuel was burned.
 - (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when weather conditions allow, for any visible PE from the stack(s) serving this emissions unit and for any visible fugitive PE from non stack egress points (i.e., building windows, doors, roof monitors, etc.). The presence or absence of any visible emissions

shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. identify the location, i.e., stack, building window, door, roof monitor, etc., and color of the visible emissions;
- b. whether the visible emissions are representative of normal operations;
- c. if the visible emissions are not representative of normal operations, the cause of the abnormal visible emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

- (3) Per § 63.1510(a), on and after the compliance date established by §63.1501, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section. Monitoring requirements for each type of affected source and emission unit are summarized in Table 3 to this subpart.
- (4) Per § 63.1510(b) *Operation, maintenance, and monitoring (OM&M) plan*, the owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The owner or operator of an existing affected source must submit the OM&M plan to the responsible permitting authority no later than the compliance date established by §63.1501(a). The owner or operator of any new affected source must submit the OM&M plan to the responsible permitting authority within 90 days after a successful initial performance test under §63.1511(b), or within 90 days after the compliance date established by §63.1501(b) if no initial performance test is required. The plan must be accompanied by a written certification by the owner or operator that the OM&M plan satisfies all requirements of this section and is otherwise consistent with the requirements of this subpart. The owner or operator must comply with all of the provisions of the OM&M plan as submitted to the permitting authority, unless and until the plan is revised in accordance with the following procedures. If the permitting authority determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of this section or this subpart, the owner or operator must promptly make all necessary revisions and resubmit the revised plan. If the owner or operator determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the owner or operator submits a

description of the changes and a revised plan incorporating them to the permitting authority. Each plan must contain the information obtained in accordance to 63.1510(b)(1) through (8).

- (5) Per § 63.1510(c) *Labeling*, the owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in §63.1506(b) are intact and legible.
- (6) Per § 63.1510(e) *Feed/charge weight*, the owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.
 - a. The accuracy of the weight measurement device or procedure must be ±1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
 - b. The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
- (7) Per § 63.1510(j)(3)(ii) *Total reactive flux injection rate*, the owner or operator must record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of solid reactive flux.
- (8) Per § 63.1510(j)(4) *Total reactive flux injection rate*, the owner or operator must calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in §63.1512(o).
- (9) Per § 63.1510(j)(5) *Total reactive flux injection rate*, the owner or operator of a group 1 furnace or in-line fluxer performing reactive fluxing may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

- (10) Per § 63.1510(o) *Group 1 furnace without add-on air pollution control devices*, the owner or operator of a group 1 furnace that is not equipped with an add-on air pollution control device shall comply with the following requirements:
- a. The owner or operator must develop, in consultation with the responsible permitting authority, a written site-specific monitoring plan. The site-specific monitoring plan must be submitted to the permitting authority as part of the OM&M plan. The site-specific monitoring plan must contain sufficient procedures to ensure continuing compliance with all applicable emission limits and must demonstrate, based on documented test results, the relationship between emissions of PM, HCl, and D/F and the proposed monitoring parameters for each pollutant. Test data must establish the highest level of PM, HCl, and D/F that will be emitted from the furnace. This may be determined by conducting performance tests and monitoring operating parameters while charging the furnace with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate. If the permitting authority determines that any revisions of the site-specific monitoring plan are necessary to meet the requirements of this section or this subpart, the owner or operator must promptly make all necessary revisions and resubmit the revised plan to the permitting authority.
 - b. The permitting authority will review and approve or disapprove a proposed plan, or request changes to a plan, based on whether the plan contains sufficient provisions to ensure continuing compliance with applicable emission limits and demonstrates, based on documented test results, the relationship between emissions of PM, HCl, and D/F and the proposed monitoring parameters for each pollutant. Test data must establish the highest level of PM, HCl, and D/F that will be emitted from the furnace. Subject to permitting agency approval of the OM&M plan, this may be determined by conducting performance tests and monitoring operating parameters while charging the furnace with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate.
 - c. Each site-specific monitoring plan must document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards.
 - d. Each site-specific monitoring plan must include provisions for unit labeling as required in paragraph (c) of this section, feed/charge weight measurement (or production weight measurement) as required in paragraph (e) of this section and flux weight measurement as required in paragraph (j) of this section.
 - e. If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in paragraph (p) of this section.
 - f. If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in paragraph (q) of this section.

- (11) Per § 63.1510(p) *Scrap inspection program for group 1 furnace without add-on air pollution control devices*, a scrap inspection program must include:
- a. A proven method for collecting representative samples and measuring the oil and coatings content of scrap samples;
 - b. A scrap inspector training program;
 - c. An established correlation between visual inspection and physical measurement of oil and coatings content of scrap samples;
 - d. Periodic physical measurements of oil and coatings content of randomly-selected scrap samples and comparison with visual inspection results;
 - e. A system for assuring that only acceptable scrap is charged to an affected group 1 furnace; and
 - f. Recordkeeping requirements to document conformance with plan requirements.
- (12) Per § 63.1510(q) *Monitoring of scrap contamination level by calculation method for group 1 furnace without add-on air pollution control devices*, the owner or operator of a group 1 furnace dedicated to processing a distinct type of furnace feed/charge composed of scrap with a uniform composition (such as rejected product from a manufacturing process for which the coating-to-scrap ratio can be documented) may include a program in the site-specific monitoring plan for determining, monitoring, and certifying the scrap contaminant level using a calculation method rather than a scrap inspection program. A scrap contaminant monitoring program using a calculation method must include:
- a. Procedures for the characterization and documentation of the contaminant level of the scrap prior to the performance test.
 - b. Limitations on the furnace feed/charge to scrap of the same composition as that used in the performance test. If the performance test was conducted with a mixture of scrap and clean charge, limitations on the proportion of scrap in the furnace feed/charge to no greater than the proportion used during the performance test.
 - c. Operating, monitoring, recordkeeping, and reporting requirements to ensure that no scrap with a contaminant level higher than that used in the performance test is charged to the furnace.
- (13) Per § 63.1510(s) *Site-specific requirements for secondary aluminum processing units*:
- a. An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with §63.1510(b), the following information:
 - i. The identification of each emission unit in the secondary aluminum processing unit;

- ii. The specific control technology or pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application;
 - iii. The emission limit calculated for each secondary aluminum processing unit and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit;
 - iv. Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of this subpart; and
 - v. The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in §63.1510(t).
- b. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:
- i. Any averaging among emissions of differing pollutants;
 - ii. The inclusion of any affected sources other than emission units in a secondary aluminum processing unit;
 - iii. The inclusion of any emission unit while it is shutdown; or
 - iv. The inclusion of any periods of startup, shutdown, or malfunction in emission calculations.
- c. To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the owner or operator must submit a request to the applicable permitting authority containing the information required by paragraph (s)(1) of this section and obtain approval of the applicable permitting authority prior to implementing any revisions.
- (14) Per § 63.1510(t) *Secondary aluminum processing unit*, except as provided in paragraph (u) of this section, where applicable, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must follow the provisions of 63.1510(t)(1) through (5).
- (15) Per § 63.1510(u) *Secondary aluminum processing unit compliance by individual emission unit demonstration*, as an alternative to the procedures of paragraph (t) of this section, an owner or operator may demonstrate, through performance tests, that each individual emission unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emission unit.
- (16) Per § 63.1510(w) *Alternative monitoring methods*, if an owner or operator wishes to use an alternative monitoring method to demonstrate compliance with any emission standard in this subpart, other than those alternative monitoring methods which may be

authorized pursuant to §63.1510(j)(5) and §63.1510(v), the owner or operator may submit an application to the Administrator. Any such application will be processed according to the criteria and procedures set forth in §63.1510(w)(1) through (6).

- (17) Per § 63.1517(a), as required by §63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.
- a. The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
 - b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
 - c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- (18) Per § 63.1517(b)(5, 7, 8, 13, 15, 16 and 17), in addition to the general records required by §63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records of:
- a. for each group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer, records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid or solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken;
 - b. for each affected source and emission unit subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test;
 - c. approved site-specific monitoring plan for a group 1 furnace without add-on air pollution control devices with records documenting conformance with the plan;
 - d. records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements;
 - e. records for any approved alternative monitoring or test procedure;
 - f. current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - i. startup, shutdown, and malfunction plan;
 - ii. OM&M plan; and
 - iii. site-specific secondary aluminum processing unit emission plan (if applicable).

- g. for each secondary aluminum processing unit, records of total charge weight, or if the owner or operator chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

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 an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (4) The permittee shall also identify the following information in the annual PER:
 - a. all incidents during which any visible particulate emissions were observed from any stack, including identification of the stack(s), serving this emissions unit;
 - b. all incidents during which any visible fugitive particulate emissions were observed from the non stack egress points (i.e., building windows, doors, roof monitors, etc.), including identification of the building window(s), door(s), roof monitor(s), serving this emissions unit;
 - c. any corrective actions taken to minimize or eliminate the visible stack particulate emissions and/or visible fugitive particulate emissions; and
 - d. each day when a fuel other than natural gas was burned in this emissions unit.
- (5) Per § 63.1515(a) *Initial notifications*, the owner or operator must submit initial notifications to the applicable permitting authority as described in paragraphs (a)(1) through (7) of this section. Paragraphs of §63.1515(a) pertaining to this area source are as follows:
 - a. as required by §63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard;
 - b. as required by §63.9(b)(3), the owner or operator of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date of this subpart and for which an application for approval of construction or reconstruction is not required under §63.5(d), must provide notification that the source is subject to the standard;
 - c. as required by §63.9(b)(5), after the effective date of this subpart, an owner or operator who intends to construct a new affected source or reconstruct an affected source subject to this subpart, or reconstruct a source such that it

becomes an affected source subject to this subpart, must provide notification of the intended construction or reconstruction. The notification must include all the information required for an application for approval of construction or reconstruction as required by §63.5(d):

- i. the application must be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date) if the construction or reconstruction commences after the effective date of this subpart; or
 - ii. The application must be submitted as soon as practicable before startup but no later than 90 days after the effective date of this subpart if the construction or reconstruction had commenced and initial startup had not occurred before the effective date;
 - d. as required by §63.9(d), the owner or operator must provide notification of any special compliance obligations for a new source; and
 - e. as required by §63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests and visible emission observations. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.
- (6) Per § 63.1515(b) *Notification of compliance status report*, each owner or operator of an existing affected source must submit a notification of compliance status report within 60 days after the compliance date established by §63.1501(a). Each owner or operator of a new affected source must submit a notification of compliance status report within 90 days after conducting the initial performance test required by §63.1511(b), or within 90 days after the compliance date established by §63.1501(b) if no initial performance test is required. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (a)(1) through (10) of this section. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. In a State with an approved operating permit program where delegation of authority under section 112(l) of the CAA has not been requested or approved, the owner or operator must provide duplicate notification to the applicable Regional Administrator. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report pertaining to this area source must include:
- a. All information required in §63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).

- b. The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).
 - c. Unit labeling as described in §63.1506(b), including process type or furnace classification and operating requirements.
 - d. The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.
 - e. The OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device).
 - f. Startup, shutdown, and malfunction plan, with revisions.
- (7) Per § 63.1516(a) *Startup, shutdown, and malfunction plan/reports*, the owner or operator must develop a written plan as described in §63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by §63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in §63.6(e)(3). In addition to the information required in §63.6(e)(3), the plan must include:
- a. procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
 - b. corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- (8) Per § 63.1516(b) *Excess emissions/summary report*, the owner or operator must submit semiannual reports according to the requirements in §63.10(e)(3). Except, the owner or operator must submit the semiannual reports within 60 days after the end of each 6-month period instead of within 30 days after the calendar half as specified in §63.10(e)(3)(v). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period. Additional requirements pertaining to this area source follow:
- a. areport must be submitted if any of these conditions occur during a 6-month reporting period:
 - i. An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter

inlet temperature, definition of acceptable scrap, or other approved operating parameter).

- ii. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in §63.6(e)(3).
 - iii. An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of this subpart.
 - iv. A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.
- b. the owner or operator must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.
- (9) Per § 63.1516(c) *Annual compliance certifications*, for the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:
- a. any period of excess emissions, as defined in paragraph (b)(1) of this section, that occurred during the year were reported as required by this subpart; and
 - b. all monitoring, recordkeeping, and reporting requirements were met during the year.
- f) Testing Requirements

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

a. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

Visible PE from fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

c. Emission Limitation:

PE shall not exceed 15.8 pounds per hour.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the requirements in 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03(B)(10).

d. Emission Limitation:

Nitrogen oxide (NO_x) emissions shall not exceed 2.00 pounds per hour and 8.76 tons per year.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 7E.

e. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 1.60 pounds per hour and 7.01 tons per year.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 10.

f. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 1.30 pounds per hour and 5.69 tons per year.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 25 or Method 25A.

g. Emission Limitation:

Sulfur dioxide (SO₂) emissions shall not exceed 77.1 pounds per hour.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 6.

h. Emission Limitation:

15 µg of D/F TEQ per Mg (2.1×10^{-4} gr of D/F TEQ per ton) of feed/charge from a group 1 furnace at a secondary aluminum production facility that is a major or area source.

Applicable Compliance Method:

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

i. Emission Limitations:

Emissions of particulate matter less than 10 microns (PM₁₀) shall not exceed 8.86 pounds per hour and 38.8 tons per year.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the requirements in 40 CFR Part 51, Appendix M, Method 201/201A.

(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. Per § 63.1511(a) *Site-specific test plan*, prior to conducting any performance test required by this subpart, the owner or operator must prepare a site-specific test plan which satisfies all of the requirements, and must obtain approval of the plan pursuant to the procedures, set forth in §63.7(c).
- b. Per § 63.1511(b) *Initial performance test*, following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit, and report the results in the notification of compliance status report as described in §63.1515(b). The owner or operator of any existing affected source for which an initial performance test is required to demonstrate compliance must conduct this initial performance test no later than the date for compliance established by §63.1501(a). The owner or operator of any new affected source for which an initial performance test is required must conduct this initial performance test within 90 days after the date for compliance established by §63.1501(b). Except for the date by which the performance test must be conducted, the owner or operator must conduct each performance test in accordance with the requirements and procedures set forth in §63.7(c). Owners or operators of affected sources located at facilities which are area sources are subject only to those performance testing requirements pertaining to

D/F. Owners or operators of sweat furnaces meeting the specifications of §63.1505(f)(1) are not required to conduct a performance test.

- i. The owner or operator must conduct each test while the affected source or emission unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.
 - ii. 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.
 - iii. 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.
- c. Per § 63.1511(c) *Test methods*, the owner or operator must use the following methods in appendix A to 40 CFR part 60 to determine compliance with the applicable emission limits or standards:
- i. Method 1 for sample and velocity traverses.
 - ii. Method 2 for velocity and volumetric flow rate.
 - iii. Method 3 for gas analysis.
 - iv. Method 4 for moisture content of the stack gas.
 - v. Method 23 for the concentration of D/F.
- d. Per § 63.1511(d) *Alternative methods*, the owner or operator may use an alternative test method, subject to approval by the Administrator.
- e. Per § 63.1511(g) *Establishment of monitoring and operating parameter values*, 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 §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 §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.
- f. Per § 63.1512(e)(1) *Group 1 furnace (including melting holding furnaces) without add-on air pollution control devices*, in the site-specific monitoring plan required by §63.1510(o), the owner or operator of a group 1 furnace (including a melting/holding furnaces) without add-on air pollution control devices must include data and information demonstrating compliance with the applicable emission limits. At this area source, if the group 1 furnace processes other than clean charge material, the owner or operator must conduct emission tests to measure emissions of D/F at the furnace exhaust outlet.
- g. Per § 63.1512(k) *Feed/charge weight measurement*, during the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, 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.
- h. Per § 63.1512(r) *Labeling*, the owner or operator of each scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace and in-line fluxer must submit the information described in §63.1515(b)(3) as part of the notification of compliance status report to document conformance with the operational standard in §63.1506(b).
- i. Per § 63.1513(d) *Conversion of D/F measurements to TEQ units*, 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), incorporated by reference in §63.1502 of this subpart, available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB 90-145756.
- (3) In addition to the testing requirements of 40 CFR Part 63, Subpart RRR and Subpart A of 40 CFR Part 63 specified above in f)(2), Ohio EPA requires the permittee, not later than 30 days prior to the proposed test date(s), to submit an "Intent to Test" notification to the Akron Regional AQMD. 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 tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA's refusal to accept the results of the emission tests.

Personnel from the Ohio EPA/Akron Regional AQMD 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.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Akron Regional AQMD within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Akron Regional AQMD.

g) **Miscellaneous Requirements**

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", 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 and operate (PTIO) 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 PTIO.
- (2) The permittee submitted Screen3 air dispersion modeling results that demonstrate the impact from new potential PM₁₀ emissions from this emissions unit plus background PM₁₀ concentrations do not contribute to a violation of the applicable National Ambient Air Quality Standard (NAAQS).

3. Emissions Unit Group - In-line fluxers (degassers): F001,F002

| EU ID | Operations, Property and/or Equipment Description |
|-------|---|
| F001 | Installation of In-line degasser #1 (DEG 1) to receive aluminum alloy melt from the HDC Furnace (emissions unit P901) at a secondary aluminum production facility that is an area source of hazardous air pollutant (HAP) emissions. This in-line fluxer is operated on a continuous operation basis to purify the molten metal prior to casting. Maximum capacity 7,500 pounds melt fluxed per hour. Emissions from the in-line fluxer are generated from reactive fluxing with potassium chloride and magnesium chloride salts. The emissions are uncontrolled and fugitive, i.e., there are no stack release points to the atmosphere. |
| F002 | Installation of In-line degasser #2 (DEG 2) to receive aluminum alloy melt from the HDC Furnace (emissions unit P901) at a secondary aluminum production facility that is an area source of hazardous air pollutant (HAP) emissions. This in-line fluxer is operated on a continuous operation basis to purify the molten metal prior to casting. Maximum capacity 7,500 pounds melt fluxed per hour. Emissions from the in-line fluxer are generated from reactive fluxing with potassium chloride and magnesium chloride salts. The emissions are uncontrolled and fugitive, i.e., there are no stack release points to the atmosphere. |

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

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

a. None.

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

a.

b) 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 | Emissions of particulate matter less than 10 microns (PM ₁₀) from each in-line fluxer shall not exceed 0.678 pound per hour and 2.97 tons per year. See b)(2)(a) and b)(2)(c). |

Final Permit-to-Install and Operate

B & C Castings Inc.

Permit Number: P0109672

Facility ID: 1677020154

Effective Date: 7/3/2012

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|--|
| | | The requirements of OAC rule 3745-31-05(A)(3)(a) also include compliance with the requirements of OAC rules 3745-17-07(B) and 3745-17-08(B). |
| b. | OAC rule 3745-31-05(A), as effective 12/01/06 | See b)(2)(d). |
| c. | OAC rule 3745-17-07(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08) | Visible PE from fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| d. | OAC rule 3745-17-08(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08) | The permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. |

(2) Additional Terms and Conditions

- a. The PM₁₀ limits established pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/01, reflect the potential to emit for this emissions unit. Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure ongoing compliance with these emissions limitations.
- b. The permittee shall apply for and, if required, obtain a modification to this permit or obtain a new final permit-to-install and operate (PTIO) prior to making any change to equipment, change in the molten metal processed, change in flux materials, change in production capacity, or any change in the method of operation that results in an increase in the allowable emissions or results in an increase in emissions of greater than the de minimis levels in OAC rule 3745-15-05 of any type of air contaminant not previously emitted.
- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 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 the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) 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 revisions 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 the PM₁₀ limitations established pursuant to OAC rule 3745-31-05(A)(3) no longer apply.
- d. The following rule paragraphs apply once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan:

The requirements of OAC rule 3745-31-05(A)(3)(a) also include compliance with the requirements of OAC rules 3745-17-07(B) and 3745-17-08(B).

The “Best Available Technology (BAT)” requirements under OAC rule 3745-31-05(A)(3)(a) are not applicable to the particulate emissions (PE) emitted from this emissions unit. BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also referred to as total suspended particulate or particulate matter) are an air contaminant without an established NAAQS.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM₁₀ emissions from this air contaminant source since the uncontrolled potential to emit for PM₁₀ is less than 10 tons/year.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when weather conditions allow, for any visible fugitive PE from non stack egress points (i.e., building windows, doors, roof monitors, etc.). The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. identify the location, i.e., building window, door, roof monitor, etc., and color of the visible emissions;
- b. whether the visible emissions are representative of normal operations;
- c. if the visible emissions are not representative of normal operations, the cause of the abnormal visible emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

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 an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (3) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all incidents during which any visible fugitive particulate emissions were observed from the non stack egress points (i.e., building windows, doors, roof monitors, etc.), including identification of the building window(s), door(s), roof monitor(s), serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

f) Testing Requirements

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

Visible PE from fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).
 - b. Emission Limitations:

Emissions of particulate matter less than 10 microns (PM₁₀) from each in-line fluxer shall not exceed 0.678 pound per hour and 2.97 tons per year.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the requirements in 40 CFR Part 51, Appendix M, Method 201/201A.

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", 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 and operate (PTIO) 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 PTIO.