State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

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

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/13/06

**CERTIFIED MAIL**

**RE: Final Title V Significant Permit Modification Chapter 3745-77 permit**

06-41-18-0064
Titanium Metals Corporation
Thomas J. Bottorf
100 Titanium Way
P.O. Box 309
Toronto, OH 43964-0309

Dear Thomas J. Bottorf:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final 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. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. 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, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: Southeast District Office
File, DAPC PMU

State of Ohio Environmental Protection Agency

# FINAL TITLE V SIGNIFICANT PERMIT MODIFICATION

| Original Effective Date: 07/12/02 | Expiration Date: 07/12/07 | Modification Effective Date: 03/13/06 |
|---|---|---|

This document constitutes issuance of a Title V significant permit modification for Facility ID: 06-41-18-0064 to:
Titanium Metals Corporation
100 Titanium Way
P.O. Box 309
Toronto, OH 43964-0309

## Emissions Unit ID (Company ID)/Emissions Unit Activity Description

B009 (No. 4 Package Boiler)
Clayton Industries Inc. - 20.92 MMBtu/hr

P003 (#1 Grinder)
Midwest Grinder - 6040

P004 (Burning Torches and Burn Shed)
Linde - CM-37

P008 (Tysaman Saws)
Tysaman - 122-BD, 26" Blade - Registration 12/27/76

P020 (Ingot Heat Fce. #31)
Flinn & Dreffein - 18 MMBTU/hr - Registration 4/4/77

P021 (Ingot Heat Fce. #1)
Swindell-Dressler - 14.35 MMBTU/hr - Registration 1/24/77

P022 (Ingot Heat Fce. #2)
Swindell-Dressler - 8.48 MMBTU/hr - Registration 1/24/77

P023 (Ingot Heat Fce. #3)
Swindell-Dressler - 6.0 MMBTU/hr - Registration 1/24/77

P024 (Ingot Heat Fce. #4)
Swindell-Dressler - 6.0 MMBTU/hr - Registration 1/24/77

P029 (Hot Mill Roughing Fce.)
Electric Furnace Co. - 3703-F - 5.4 MMBTU/hr - Registration 12/27/76

P030 (Car Bottom Fces.)
Salem Brosius - 3606 & 3607 - 2 @ 6.0 MMBTU/hr - Registration 12/27/76

P037 (Coil Pickle Line)
Production Machinery (includes the welder)

P039 (Sheet (Hand) Pickler)
Atlas Mineral & Heil Process - Custom design

P041 (Plate Pickler)
Heil - Custom Design

P044 (Hot Mill Finishing Fce.)
Electric Furnace Co. - 3704-F - 6.6 MMBTU/hr - Registration 12/27/76

P046 (Ingot Heat Fce. #32)
Flinn & Dreffein - 18 MMBTU/hr - Registration 4/4/77

P047 (Ingot Heat Fce. #33)
Flinn & Dreffein - 18 MMBTU/hr - Registration 4/4/77

P050 (Descale Pickle Line)
Allegheny Plastics - Custom Design (includes the welder and torch/weld)

P051 (Ingot Heat Fce. #34)
Flinn & Dreffein - 15.72 MMBTU/hr - Registration 10/10/80

P054 (#7 Grinder)
Midwest Grinder - 4230 - Fixed Hood

P056 (#5 Grinder)
Midwest Grinder - 62

P057 (#6 Grinder)
Midwest Grinder - 62 - Fixed Hood

P058 (Tysaman Grinder)
Tysaman Grinder - Mark 50

P059 (Fox Grinder #1)
Fox Grinder - 1895A

P060 (Fox Grinder #2)
Fox Grinder - 1895A

P062 (Reheat Furnace #11)
Forge Box Furnace - Pittsburgh Industrial Furnace Co. - 10 MMBtu/hr

P063 (Reheat Furnace #12)
Forge Box Furnace - Pittsburgh Industrial Furnace Co. - 10 MMBtu/hr

P067 (#8 Midwest Grinder)
Midwest Grinder

P069 (Ingot Heating Furnace No. 1)
Natural gas fire batch furnace - 25 MMBtu/hr

P070 (Ingot Heating Furnace No. 2)
Natural gas fire batch furnace - 25 MMBtu/hr

P071 (Ingot Heating Furnace No. 3)
Natural gas fire batch furnace - 25 MMBtu/hr

P072 (Ingot Heating Furnace No. 4)
Natural gas fire batch furnace - 25 MMBtu/hr

P073 (Ingot Heating Furnace No. 5)
Natural gas fire batch furnace - 25 MMBtu/hr

P074 (Ingot Heating Furnace No. 6)
Natural gas fire batch furnace - 25 MMBtu/hr

P076 (Billet Pickle Line)
Hydrofluoric and Nitric Acid pickling of billets

P901 (Blast Room)
Clemco-Clementina - SCD-2460 (includes material handling)

P902 (Descale Pickle Line Shot Blaster)
Wheelabrator-Frye 4 W/A Strip Cleaning - On Descale Pickle Line (includes material handling)

P903 (Pangborn Sandblast Machine)
Pangborn - Type ES

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

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

Ohio Environmental Protection Agency

Joseph P. Koncelik
Director

## PART I - GENERAL TERMS AND CONDITIONS

### *A. State and Federally Enforceable Section*

### 1. Monitoring and Related Record Keeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.III of Part III of this Title V permit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. The operating conditions existing at the time of sampling or measurement.
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*

c. The permittee shall submit required reports in the following manner:

i. **All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:**

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with General Term and Condition A.1.c.ii below; and each report shall cover the previous calendar quarter.

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) constitutes a violation of an emission limitation (or control requirement) and, therefore, is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a

federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.
*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

ii. **Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.IV of Part III of this Title V permit or, in some cases, in Part II of this Title V permit, all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this General Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this General Term and Condition.

See B.6 below if no deviations occurred during the quarter.
*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

iii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted in the following manner:**

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; General Terms and Conditions: A.2, A.3, A.4, A.6.e, A.7, A.12, A.14, A.18, A.19, A.20, and A.22 of Part I of this Title V permit, as well as any deviations from the requirements in Section A.V or A.VI of Part III of this Title V permit**,** and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in Part II.A of this Title V permit. Annual reporting of deviations is

deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with General Term and Condition A.1.c.ii above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.
*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))*

iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*

v. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

**2. Scheduled Maintenance**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in General Term and Condition A.1.c.i above.
*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

**3. Risk Management Plans**

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

b. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

*(Authority for term: OAC rule 3745-77-07(A)(4))*

**4. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.
*(Authority for term: OAC rule 3745-77-07(A)(5))*

**5. Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

*(Authority for term: OAC rule 3745-77-07(A)(6))*

**6. General Requirements**

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

f. Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable upon final issuance of all applicable OAC Chapter 3745-35 operating permits and/or registrations for all subject emissions units located at the facility and:

   i. the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a “major source” as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

   ii. the permittee no longer meets the definition of a “major source” as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

   iii. a combination of i. and ii. above.

   The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.
   *(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))*

**7. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.
*(Authority for term: OAC rule 3745-77-07(A)(8))*

**8. Marketable Permit Programs**

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.
*(Authority for term: OAC rule 3745-77-07(A)(9))*

**9. Reasonably Anticipated Operating Scenarios**

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.
*(Authority for term: OAC rule 3745-77-07(A)(10))*

**10. Reopening for Cause**

This Title V permit will be reopened prior to its expiration date under the following conditions:

a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

*(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))*

**11. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.
*(Authority for term: OAC rule 3745-77-07(B))*

**12. Compliance Requirements**

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.

ii. Compliance certifications shall include the following:

(a) An identification of each term or condition of this permit that is the basis of the certification.

(b) The permittee's current compliance status.

(c) Whether compliance was continuous or intermittent.

(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.

(e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

*(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))*

**13. Permit Shield**

a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

*(Authority for term: OAC rule 3745-77-07(F))*

**14. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The

notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).
*(Authority for term: OAC rules 3745-77-07(H)(1) and (2))*

**15. Emergencies**

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.
*(Authority for term: OAC rule 3745-77-07(G))*

**16. Off-Permit Changes**

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.
*(Authority for term: OAC rule 3745-77-07(I))*

**17. Compliance Method Requirements**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.
*(This term is provided for informational purposes only.)*

**18. Insignificant Activities or Emissions Levels**

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.
*(Authority for term: OAC rule 3745-77-07(A)(1))*

**19. Permit to Install Requirement**

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.
*(Authority for term: OAC rule 3745-77-07(A)(1))*

**20. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.
*(Authority for term: OAC rule 3745-77-07(A)(1))*

**21. Permanent Shutdown of an Emissions Unit**

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that 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 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.
*(Authority for term: OAC rule 3745-77-01)*

**22. Title VI Provisions**

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

*(Authority for term: OAC rule 3745-77-01(H)(11))*

## B. *State Only Enforceable Section*

### 1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

### 2. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

### 3. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

### 4. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

### 5. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

### 6. Additional Reporting Requirements When There Are No Deviations of <u>Federally Enforceable</u> Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a. where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in General Term and Condition A.1.c.ii; or

b. where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or

c. where the company's responsible official has certified that an emissions unit has been permanently shut down.

# Part II - Specific Facility Terms and Conditions

## A. State and Federally Enforceable Section

**None**

## B. State Only Enforceable Section

**1.** The following insignificant emissions units are located at this facility:

B004 - Sunbeam conveyor furnace
B007 - standby boiler #1
B010 - standby boiler #7
P002 - strip grind line
P019 - Z-mill
P028 - pack line oven
P053 - continental saw
P061 - billet polishers (3)
T001 - bulk hydraulic oil storage tank
T002 - forge quench tank
T003 - GFM quench tank
T004 - quench tank (4000-ton press)
F001 - paved roadways and parking areas
F002 - continuous vacuum anneal line
F003 - 2500-ton forging press
F004 - gag press
F005 - bar forging machine
F006 - billet peeler
F007 - GFM torch cut
F008 - lab etch room
F009 - 4000-ton forge press
K001 - alkaline cleaner
Z010 - coil tailing line
Z022 - #1 vacuum creep flattener
Z023 - #2 vacuum creep flattener
Z025 - ingot coating
Z044 - hydrofluoric acid tank
Z045 - hydrofluoric acid tank
Z046 - titanium fluoride solution storage tank #1
Z047 - titanium fluoride solution storage tank #2
Z048 - Z-mill oil storage tank
Z049 - Z-mill oil storage tank
Z052 - clean oil storage tank
Z053 - dirty oil storage tank
Z055 - nitric acid storage tank #1
Z056 - nitric acid storage tank #2
Z073 - titanium fluoride solution storage tank #3
Z075 - hydrofluoric storage tank #3
Z076 - nitric acid storage tank #3
Z079 - blue and bifluoride etch areas

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

**2.** The owner/operator shall comply with any applicable State and federal requirements governing the storage, treatment, transportation and disposal of any waste material generated by the operation of the emissions unit.

**3.** The permittee is hereby notified that this permit, and all Agency records concerning the operation of this permitted emissions unit, are subject to public disclosure in accordance with OAC rule 3745-49-03.

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** No. 4 Package Boiler (B009)

**Activity Description:** Clayton Industries Inc. - 20.92 MMBtu/hr

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 20.92 mmBtu/hr natural gas-fired boiler | OAC rule 3745-31-05(A)(3) (PTI 06-91602) | Sulfur dioxide (SO2) emissions shall not exceed 0.012 lb/hr and 0.05 tpy.<br><br>Nitrogen oxides (NOx) emissions shall not exceed 2.34 lbs/hr and 9.23 tpy.<br><br>Carbon monoxide (CO) emissions shall not exceed 1.72 lbs/hr and 6.79 tpy<br><br>Volatile organic compound (VOC) emissions shall not exceed 0.113 lb/hr and 0.445 tpy.<br><br>Particulate emissions (PE) shall not exceed 0.039 lb/hr and 0.154 tpy.<br><br>Visible PE from any stack associated with this emissions unit shall not exceed 5% opacity, as a 6-minute average.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-08 and 3745-17-10(B).<br><br>See sections A.I.2.b and A.I.2.c below. |
| | OAC rule 3745-17-07(A) | The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | OAC rule 3745-17-08 | The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-10(B) | The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | 40 CFR Part 60, Subpart Dc | The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

**2. Additional Terms and Conditions**

**2.a** Since natural gas is the only fuel fired in this emissions unit, OAC Chapter 3745-18 is not applicable. Hence, there is no SO2 emission limitation from OAC chapter 3745-18 for this emissions unit.

**2.b** The emission limitations of 0.05 tpy of SO2, 9.23 tpy of NOx, 6.79 tpy of CO, 0.445 tpy of VOC and 0.154 tpy of PE reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to specify record keeping and/or reporting requirements to ensure compliance with these limits.

**2.c** The natural gas consumption for emissions unit B009 shall not exceed 160,130 thousand cubic feet per year, as a rolling, 12-month summation.

## II. Operational Restrictions

**1.** The permittee shall burn only natural gas fuel in this emissions unit.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## III. Monitoring and/or Record Keeping 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**2.** The permittee shall collect and record the total quantity of natural gas used in emissions unit B009 during each month, in thousands of cubic feet.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**3.** The permittee shall collect and record during each month, the updated rolling, 12-month summation for the total natural gas usage in emissions unit B009.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## IV. Reporting Requirements

**1.** 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**2.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month limitation for natural gas usage.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**3.** The permittee shall submit annual reports that specify the total NOx, SO2, CO, VOC and PE emissions from emissions unit B009, for the previous calendar year. These reports shall be submitted by January 31 of each year.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

Visible PE from any stack associated with this emissions unit shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in 40 CFR Part 60, Method 9.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.b** Emission Limitation:

0.039 lb/hr of PE

Applicable Compliance Method:

Compliance may be determined by dividing the particulate emission factor of 1.9 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 20.92 mmBtu/hr.

The particulate emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 5.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.c** Emission Limitation:

0.154 tpy of PE

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.039 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 90 percent, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.d** Emission Limitation:

0.012 lb/hr of SO2

Applicable Compliance Method:

Compliance may be determined by dividing the SO2 emission factor of 0.6 lb/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 20.92 mmBtu/hr.

The SO2 emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 6.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.e** Emission Limitation:

0.05 tpy of SO2

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable SO2 limitation (0.012 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 90 percent, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.f** Emission Limitation:

2.34 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be determined by dividing the manufacturer's supplied NOx emission factor of 115.29 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 20.92 mmBtu/hr.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 7.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.g** Emission Limitation:

9.23 tpy of NOx

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable NOx limitation (2.34 lbs/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 90 percent, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.h** Emission Limitation:

1.72 lbs/hr of CO

Applicable Compliance Method:

Compliance may be determined by dividing the CO emission factor of 84 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 20.92 mmBtu/hr.

The CO emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 10.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.i** Emission Limitation:

6.79 tpy of CO

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable CO limitation (1.72 lbs/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 90 percent, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.j** Emission Limitation:

0.113 lb/hr of VOC

Applicable Compliance Method:

Compliance may be determined by dividing the VOC emission factor of 5.5 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 20.92 mmBtu/hr.

The VOC emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 18 or 25.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.k** Emission Limitation:

0.445 tpy of VOC

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC limitation (0.113 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 90 percent, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** #1 Grinder (P003)

**Activity Description:** Midwest Grinder - 6040

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Fixed-Hood Midwest Grinder #1 with dedicated five-module baghouse | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-17-11(B)(1) | 9.12 lbs/hr of particulate emissions (PE) from the baghouse. See A.I.2.b. |
| For waste baghouse dust collection and handling operations | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust (See section A.I.2.c.) |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall not be operated without the use of the dust collection system and baghouse.

**2.b** The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 9.12 pounds per hour. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 9.12 lbs/hour, the permittee shall comply with the more stringent limitation.

**2.c** The permittee shall employ and properly maintain the lids and connecting piping or other comparable equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate any visible emissions of fugitive dust during the handling of the collected material.

## II. Operational Restrictions

**1.** Except as provided in the following sentence, the pressure drop across the baghouse or each individual module, which ever is applicable, shall be maintained within the range of 2 to 10 inches of water column while the emissions unit is in operation. This allowable operating parameter may be exceeded while the control equipment is in cleaning mode. A new pressure drop range shall be permissible if stack testing pursuant to V.2 indicates complying emission rates at such new range.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**2.** PE from this emissions unit shall be captured and vented to the baghouse at a rate sufficient to minimize or eliminate fugitive emissions inside the building.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse (or individual modules, whichever is applicable) while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis while the baghouse is in standard, non-cleaning mode.

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

**2.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

e. any corrective actions taken to 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 under item (d) above or continue the visible emission 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.

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

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

## IV. Reporting Requirements (continued)

**2.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

9.12 lbs/hr of PE

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

**1.b** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

**1.c** Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and procedures in OAC rule 3745-17-03(B)(3).

[Authority Citation: OAC rule 3745-17-03(B)(3) and OAC rule 3745-77-07(C)(1)]

## V. Testing Requirements (continued)

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

a. The emission testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE rate.

c. The following test method shall be employed to demonstrate compliance with the allowable PE rate: Method 5 of 40 CFR, Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office.

e. A PE test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Southeast District Office's refusal to accept the results of the emission tests.

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the tests, 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 test shall be signed by the person or persons responsible for the test and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Burning Torches and Burn Shed (P004)

**Activity Description:** Linde - CM-37

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| carriage driven and hand torches | OAC rule 3745-17-07(B)(1) | Visible particulate emissions (PE) of fugitive dust shall not exceed 20% opacity, as a 3-minute average. |
| | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust See A.I.2.a. |
| | OAC rule 3745-17-07(A)(1) | Visible PE from the stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule. |
| | OAC rule 3745-17-11(B)(1) | 10.0 lbs of PE/hr See A.I.2.b. |

**2. Additional Terms and Conditions**

**2.a** The permittee shall properly maintain the existing partial enclosure to minimize or eliminate visible emissions of fugitive dust.

**2.b** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable particulate emission limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the particulate emissions are limited to less than 10 pounds per hour.

### II. Operational Restrictions

**None**

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

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

d. the total duration of any visible 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 under item (d) above or continue the visible emission 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.

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

**2.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

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

d. the total duration of any visible 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 under item (d) above or continue the visible emission 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.

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

## IV. Reporting Requirements

**1.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

**2.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

10.0 lbs/hr of PE

Applicable Compliance Method:

Compliance may be determined by the use of an emission factor (0.05 lb of PE/ton of metal processed) found in the U.S. EPA publication titled "Compilation of Air Pollutant Emission Factors," AP-42 (10/86), Table 12.5-1, page 12 (metal scarfing).

If required, compliance shall be demonstrated based upon the emission testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

**1.b** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

**1.c** Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and procedures in OAC rule 3745-17-03(B)(3).

[Authority Citation: OAC rule 3745-17-03(B)(3) and OAC rule 3745-77-07(C)(1)]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Tysaman Saws (P008)

**Activity Description:** Tysaman - 122-BD, 26" Blade - Registration 12/27/76

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| two abrasive saws with wet fume suppression (water spray) | OAC rule 3745-17-07(A)(1) | Visible particulate emissions (PE) from the saws shall not exceed 20% opacity, as a 6-minute average, except as provided by rule. |
| | OAC rule 3745-17-11(B)(1) | 6.52 lbs of PE/hr<br>See A.I.2.b. |

**2. Additional Terms and Conditions**

**2.a** The Tysaman saws shall only be operated with the wet fume suppression equipment in operation.

**2.b** The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 6.52 pounds per hour. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 6.52 lbs/hour, the permittee shall comply with the more stringent limitation.

### II. Operational Restrictions

**None**

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

d. the total duration of any visible 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 under item (d) above or continue the visible emission 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.

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

## IV. Reporting Requirements

**1.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

6.52 lbs/hr of PE

Applicable Compliance Method:

Compliance may be determined by multiplying the emission factor, 0.1 lb of PE/ton of metal processed, found in the U.S. EPA publication titled "Compilation of Air Pollutant Emission Factors," AP-42 (10/86), Table 12.5-1, page 12, by the maximum process weight rate, in tons per hour.

If required, compliance shall be demonstrated based upon the emission testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ingot Heat Fce. #31 (P020)

**Activity Description:** Flinn & Dreffein - 18 MMBTU/hr - Registration 4/4/77

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| ingot heat furnace #31 (18 mmBtu/hr) | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |
| | OAC rule 3745-18-06(E)(2) | 55.4 lbs/hr of sulfur dioxide (SO2) |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to particulate emissions, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The permittee shall burn only natural gas in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

### III. Monitoring and/or Record Keeping 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.

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

### IV. Reporting Requirements

**1.** 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.

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

## V. Testing Requirements

**1.** Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

**1.a** Emission Limitation:

55.4 lbs/hr of SO2

Applicable Compliance Method:

The permittee shall determine compliance with the above limit based upon multiplying the AP-42 emission factor for SO2 emissions (resulting from the operation of natural gas fuel burning equipment) by the maximum hourly natural gas consumption rate of the emissions unit. Therefore, the emission factor of 0.6 pound of SO2 produced per million cubic feet of natural gas fired shall be multiplied by the maximum hourly volume of natural gas fired in the furnace, in millions of cubic feet per hour, to calculate an SO2 emission rate in pounds per hour.

The above SO2 emission factor was obtained from AP-42, 5th Edition (revised 7/98), Chapter 1.4, Table 1.4-2

[Authority Citation: OAC rule 3745-18-06(E)(2) and OAC rule 3745-77-07(C)(1)]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ingot Heat Fce. #1 (P021)

**Activity Description:** Swindell-Dressler - 14.35 MMBTU/hr - Registration 1/24/77

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| ingot heat furnace #1 (14.35 mmBtu/hr) | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |
| | OAC rule 3745-18-06(E)(2) | 55.4 lbs/hr of sulfur dioxide (SO2) |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to particulate emissions, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The permittee shall burn only natural gas in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

### III. Monitoring and/or Record Keeping 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.

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

### IV. Reporting Requirements

**1.** 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.

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

## V. Testing Requirements

**1.** Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

Emission Limitation:

55.4 lbs/hr of SO2

Applicable Compliance Method:

The permittee shall determine compliance with the above limit based upon multiplying the AP-42 emission factor for SO2 emissions (resulting from the operation of natural gas fuel burning equipment) by the maximum hourly natural gas consumption rate of the emissions unit. Therefore, the emission factor of 0.6 pound of SO2 produced per million cubic feet of natural gas fired shall be multiplied by the maximum hourly volume of natural gas fired in the furnace, in millions of cubic feet per hour, to calculate an SO2 emission rate in pounds per hour.

The above SO2 emission factor was obtained from AP-42, 5th Edition (revised 7/98), Chapter 1.4, Table 1.4-2

[Authority Citation: OAC rule 3745-18-06(E)(2) and OAC rule 3745-77-07(C)(1)]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ingot Heat Fce. #2 (P022)

**Activity Description:** Swindell-Dressler - 8.48 MMBTU/hr - Registration 1/24/77

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| ingot heat furnace #2 (8.48 mmBtu/hr) | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |
| | OAC rule 3745-18-06(E)(2) | 55.4 lbs/hr of sulfur dioxide (SO2) |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to particulate emissions, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The permittee shall burn only natural gas in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

### III. Monitoring and/or Record Keeping 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.

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

### IV. Reporting Requirements

**1.** 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.

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

## V. Testing Requirements

**1.** Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

Emission Limitation:

55.4 lbs/hr of SO2

Applicable Compliance Method:

The permittee shall determine compliance with the above limit based upon multiplying the AP-42 emission factor for SO2 emissions (resulting from the operation of natural gas fuel burning equipment) by the maximum hourly natural gas consumption rate of the emissions unit. Therefore, the emission factor of 0.6 pound of SO2 produced per million cubic feet of natural gas fired shall be multiplied by the maximum hourly volume of natural gas fired in the furnace, in millions of cubic feet per hour, to calculate an SO2 emission rate in pounds per hour.

The above SO2 emission factor was obtained from AP-42, 5th Edition (revised 7/98), Chapter 1.4, Table 1.4-2

[Authority Citation: OAC rule 3745-18-06(E)(2) and OAC rule 3745-77-07(C)(1)]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ingot Heat Fce. #3 (P023)

**Activity Description:** Swindell-Dressler - 6.0 MMBTU/hr - Registration 1/24/77

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| ingot heat furnace #3 (6.0 mmBtu/hr) | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |
| | OAC rule 3745-18-06(E)(2) | 55.4 lbs/hr of sulfur dioxide (SO2) |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to particulate emissions, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The permittee shall burn only natural gas in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

### III. Monitoring and/or Record Keeping 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.

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

### IV. Reporting Requirements

**1.** 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.

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

## V. Testing Requirements

**1.** Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

Emission Limitation:

55.4 lbs/hr of SO2

Applicable Compliance Method:

The permittee shall determine compliance with the above limit based upon multiplying the AP-42 emission factor for SO2 emissions (resulting from the operation of natural gas fuel burning equipment) by the maximum hourly natural gas consumption rate of the emissions unit. Therefore, the emission factor of 0.6 pound of SO2 produced per million cubic feet of natural gas fired shall be multiplied by the maximum hourly volume of natural gas fired in the furnace, in millions of cubic feet per hour, to calculate an SO2 emission rate in pounds per hour.

The above SO2 emission factor was obtained from AP-42, 5th Edition (revised 7/98), Chapter 1.4, Table 1.4-2

[Authority Citation: OAC rule 3745-18-06(E)(2) and OAC rule 3745-77-07(C)(1)]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ingot Heat Fce. #4 (P024)

**Activity Description:** Swindell-Dressler - 6.0 MMBTU/hr - Registration 1/24/77

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| ingot heat furnace #4 (6.0 mmBtu/hr) | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |
| | OAC rule 3745-18-06(E)(2) | 55.4 lbs/hr of sulfur dioxide (SO2) |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to particulate emissions, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The permittee shall burn only natural gas in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

### III. Monitoring and/or Record Keeping 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.

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

### IV. Reporting Requirements

**1.** 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.

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

## V. Testing Requirements

**1.** Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

Emission Limitation:

55.4 lbs/hr of SO2

Applicable Compliance Method:

The permittee shall determine compliance with the above limit based upon multiplying the AP-42 emission factor for SO2 emissions (resulting from the operation of natural gas fuel burning equipment) by the maximum hourly natural gas consumption rate of the emissions unit. Therefore, the emission factor of 0.6 pound of SO2 produced per million cubic feet of natural gas fired shall be multiplied by the maximum hourly volume of natural gas fired in the furnace, in millions of cubic feet per hour, to calculate an SO2 emission rate in pounds per hour.

The above SO2 emission factor was obtained from AP-42, 5th Edition (revised 7/98), Chapter 1.4, Table 1.4-2

[Authority Citation: OAC rule 3745-18-06(E)(2) and OAC rule 3745-77-07(C)(1)]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Hot Mill Roughing Fce. (P029)

**Activity Description:** Electric Furnace Co. - 3703-F - 5.4 MMBTU/hr - Registration 12/27/76

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| hot mill roughing furnace (5.4 mmBtu/hr) | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |
| | OAC rule 3745-18-06(E)(2) | 24.9 lbs/hr of sulfur dioxide (SO2) |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to particulate emissions, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The permittee shall burn only natural gas in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

### III. Monitoring and/or Record Keeping 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.

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

### IV. Reporting Requirements

**1.** 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.

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

## V. Testing Requirements

**1.** Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

Emission Limitation:

24.9 lbs/hr of SO2

Applicable Compliance Method:

The permittee shall determine compliance with the above limit based upon multiplying the AP-42 emission factor for SO2 emissions (resulting from the operation of natural gas fuel burning equipment) by the maximum hourly natural gas consumption rate of the emissions unit. Therefore, the emission factor of 0.6 pound of SO2 produced per million cubic feet of natural gas fired shall be multiplied by the maximum hourly volume of natural gas fired in the furnace, in millions of cubic feet per hour, to calculate an SO2 emission rate in pounds per hour.

The above SO2 emission factor was obtained from AP-42, 5th Edition (revised 7/98), Chapter 1.4, Table 1.4-2

[Authority Citation: OAC rule 3745-18-06(E)(2) and OAC rule 3745-77-07(C)(1)]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Car Bottom Fces. (P030)

**Activity Description:** Salem Brosius - 3606 & 3607 - 2 @ 6.0 MMBTU/hr - Registration 12/27/76

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| car bottom furnace (6.0 mmBtu/hr) | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |
| | OAC rule 3745-18-06(E)(2) | 47.7 lbs/hr of sulfur dioxide (SO2) |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to particulate emissions, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The permittee shall burn only natural gas in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

### III. Monitoring and/or Record Keeping 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.

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

### IV. Reporting Requirements

**1.** 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.

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

## V. Testing Requirements

**1.** Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

Emission Limitation:

47.7 lbs/hr of SO2

Applicable Compliance Method:

The permittee shall determine compliance with the above limit based upon multiplying the AP-42 emission factor for SO2 emissions (resulting from the operation of natural gas fuel burning equipment) by the maximum hourly natural gas consumption rate of the emissions unit. Therefore, the emission factor of 0.6 pound of SO2 produced per million cubic feet of natural gas fired shall be multiplied by the maximum hourly volume of natural gas fired in the furnace, in millions of cubic feet per hour, to calculate an SO2 emission rate in pounds per hour.

The above SO2 emission factor was obtained from AP-42, 5th Edition (revised 7/98), Chapter 1.4, Table 1.4-2

[Authority Citation: OAC rule 3745-18-06(E)(2) and OAC rule 3745-77-07(C)(1)]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Coil Pickle Line (P037)

**Activity Description:** Production Machinery (includes the welder)

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| coil pickle line, with venturi scrubber | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-17-11(B)(1) | 15.5 lbs/hr of particulate emissions (PE)<br>See A.I.2.a. |

**2. Additional Terms and Conditions**

**2.a** The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 15.5 pounds per hour. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 15.5 lbs/hour, the permittee shall comply with the more stringent limitation.

**2.b** The coil pickler shall not be operated without the wet scrubber being in operation.

### II. Operational Restrictions

**1.** The permittee shall follow the manufacturer's recommended maintenance, at the recommended intervals, on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to the exhaust system, scrubber fans, and motors associated with those pumps and fans.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**2.** The scrubber internals and mist eliminators shall be cleaned at intervals sufficient to prevent buildup of solids or other fouling.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

### III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall maintain a log documenting inspections, repairs, and maintenance as described in sections A.II.1 and A.II.2 above.

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

## III. Monitoring and/or Record Keeping Requirements (continued)

**2.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

d. the total duration of any visible 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 under item (d) above or continue the visible emission 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.

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

## IV. Reporting Requirements

**1.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

15.5 lbs/hr of PE

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

No testing is specifically required by this permit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A). Such testing may be requested at opacity levels less than those required by the visible particulate emission limit specified in section A.I.1.

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Sheet (Hand) Pickler (P039)

**Activity Description:** Atlas Mineral & Heil Process - Custom design

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| sheet (hand) pickler, with Xerxes scrubber | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-17-11(B)(1) | 1.15 lbs/hr of particulate emissions (PE)<br>See A.I.2.a. |

**2. Additional Terms and Conditions**

**2.a** The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 1.15 pounds per hour. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 1.15 lbs/hour, the permittee shall comply with the more stringent limitation.

**2.b** The sheet pickler shall not be operated without the wet scrubber being in operation.

### II. Operational Restrictions

**1.** The permittee shall follow the manufacturer's recommended maintenance, at the recommended intervals, on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to the exhaust system, scrubber fans, and motors associated with those pumps and fans.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**2.** The scrubber internals and mist eliminators shall be cleaned at intervals sufficient to prevent buildup of solids or other fouling.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**3.** The pressure drop across the scrubber for this emissions unit shall be continuously maintained at a value of not less than 2.0 inches of water column.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**4.** The scrubber water flow rate for this emissions unit shall be maintained at not less than 200 gallons per minute at all times.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## II. Operational Restrictions (continued)

**5.** The pH of the scrubber water for this emissions unit shall be maintained at not less than 5 at all times.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**6.** The scrubber system shall be operated continuously (i.e., 8760 hours per year) unless the pickling/rinse tanks are empty or covered.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall maintain a log documenting inspections, repairs, and maintenance as described in sections A.II.1 and A.II.2.

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

**2.** The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while this emissions unit is in operation. Appropriate procedures and analytical methods shall be followed to sample and analyze the scrubber water for pH. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

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

**3.** The permittee shall collect and record the following information each week:

a. the pressure drop across the scrubber, in inches of water column;
b. the scrubber water flow rate, in gallons per minute;
c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit; and
d. the scrubber water pH.

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

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at the levels specified in the Operational Restrictions above:

a. the static pressure drop across the scrubber;
b. the scrubber water flow rate; and,
c. the scrubber water pH.

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

**2.** The permittee shall immediately report to Ohio EPA all periods of time during which the scrubber system was not operated while this emissions unit was in operation. These reports shall include any corrective action or preventive measures taken.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

**1.a** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

**1.b** Emission Limitation:

1.15 lbs/hr of PE

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

No testing is specifically required by this permit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A). Such testing may be requested at opacity levels less than those required by the visible particulate emission limit specified in section A.I.1.

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Plate Pickler (P041)

**Activity Description:** Heil - Custom Design

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| plate pickler, with wet scrubber | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-17-11(B)(1) | 9.84 lbs/hr of particulate emissions (PE)<br>See A.I.2.a. |

**2. Additional Terms and Conditions**

**2.a** The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 9.84 pounds per hour. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 9.84 lbs/hour, the permittee shall comply with the more stringent limitation.

**2.b** The plate pickler shall not be operated without the wet scrubber being in operation.

### II. Operational Restrictions

**1.** The permittee shall follow the manufacturer's recommended maintenance, at the recommended intervals, on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to the exhaust system, scrubber fans, and motors associated with those pumps and fans.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**2.** The scrubber internals and mist eliminators shall be cleaned at intervals sufficient to prevent buildup of solids or other fouling.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

### III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall maintain a log documenting inspections, repairs, and maintenance as described in sections A.II.1 and A.II.2 above.

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

## III. Monitoring and/or Record Keeping Requirements (continued)

**2.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

d. the total duration of any visible 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 under item (d) above or continue the visible emission 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.

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

## IV. Reporting Requirements

**1.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

9.84 lbs/hr of PE

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

No testing is specifically required by this permit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A). Such testing may be requested at opacity levels less than those required by the visible particulate emission limit specified in section A.I.1.

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Hot Mill Finishing Fce. (P044)

**Activity Description:** Electric Furnace Co. - 3704-F - 6.6 MMBTU/hr - Registration 12/27/76

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| hot mill finishing furnace (6.6 mmBtu/hr) | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |
| | OAC rule 3745-18-06(E)(2) | 18.3 lbs/hr of sulfur dioxide (SO2) |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to particulate emissions, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The permittee shall burn only natural gas in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

### III. Monitoring and/or Record Keeping 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.

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

### IV. Reporting Requirements

**1.** 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.

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

## V. Testing Requirements

**1.** Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

**1.a** Emission Limitation:

18.3 lbs/hr of SO2

Applicable Compliance Method:

The permittee shall determine compliance with the above limit based upon multiplying the AP-42 emission factor for SO2 emissions (resulting from the operation of natural gas fuel burning equipment) by the maximum hourly natural gas consumption rate of the emissions unit. Therefore, the emission factor of 0.6 pound of SO2 produced per million cubic feet of natural gas fired shall be multiplied by the maximum hourly volume of natural gas fired in the furnace, in millions of cubic feet per hour, to calculate an SO2 emission rate in pounds per hour.

The above SO2 emission factor was obtained from AP-42, 5th Edition (revised 7/98), Chapter 1.4, Table 1.4-2

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ingot Heat Fce. #32 (P046)

**Activity Description:** Flinn & Dreffein - 18 MMBTU/hr - Registration 4/4/77

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| ingot heat furnace #32 (18 mmBtu/hr) | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |
| | OAC rule 3745-18-06(E)(2) | 55.4 lbs/hr of sulfur dioxide (SO2) |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to particulate emissions, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The permittee shall burn only natural gas in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

### III. Monitoring and/or Record Keeping 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.

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

### IV. Reporting Requirements

**1.** 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.

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

## V. Testing Requirements

**1.** Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

**1.a** Emission Limitation:

55.4 lbs/hr of SO2

Applicable Compliance Method:

The permittee shall determine compliance with the above limit based upon multiplying the AP-42 emission factor for SO2 emissions (resulting from the operation of natural gas fuel burning equipment) by the maximum hourly natural gas consumption rate of the emissions unit. Therefore, the emission factor of 0.6 pound of SO2 produced per million cubic feet of natural gas fired shall be multiplied by the maximum hourly volume of natural gas fired in the furnace, in millions of cubic feet per hour, to calculate an SO2 emission rate in pounds per hour.

The above SO2 emission factor was obtained from AP-42, 5th Edition (revised 7/98), Chapter 1.4, Table 1.4-2

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ingot Heat Fce. #33 (P047)

**Activity Description:** Flinn & Dreffein - 18 MMBTU/hr - Registration 4/4/77

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| ingot heat furnace #33 (18 mmBtu/hr) | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |
| | OAC rule 3745-18-06(E)(2) | 55.4 lbs/hr of sulfur dioxide (SO2) |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to particulate emissions, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The permittee shall burn only natural gas in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

### III. Monitoring and/or Record Keeping 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.

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

### IV. Reporting Requirements

**1.** 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.

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

## V. Testing Requirements

**1.** Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

**1.a** Emission Limitation:

55.4 lbs/hr of SO2

Applicable Compliance Method:

The permittee shall determine compliance with the above limit based upon multiplying the AP-42 emission factor for SO2 emissions (resulting from the operation of natural gas fuel burning equipment) by the maximum hourly natural gas consumption rate of the emissions unit. Therefore, the emission factor of 0.6 pound of SO2 produced per million cubic feet of natural gas fired shall be multiplied by the maximum hourly volume of natural gas fired in the furnace, in millions of cubic feet per hour, to calculate an SO2 emission rate in pounds per hour.

The above SO2 emission factor was obtained from AP-42, 5th Edition (revised 7/98), Chapter 1.4, Table 1.4-2

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Descale Pickle Line (P050)

**Activity Description:** Allegheny Plastics - Custom Design (includes the welder and torch/weld)

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| descale pickle line, with venturi scrubber | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-17-11(B)(1) | 13.18 lbs/hr of particulate emissions (PE)<br>See A.I.2.a. |

**2. Additional Terms and Conditions**

**2.a** The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 13.18 pounds per hour. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 13.18 lbs/hour, the permittee shall comply with the more stringent limitation.

**2.b** The descale pickler shall not be operated without the wet scrubber being in operation.

### II. Operational Restrictions

**1.** The permittee shall follow the manufacturer's recommended maintenance, at the recommended intervals, on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to the exhaust system, scrubber fans, and motors associated with those pumps and fans.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**2.** The scrubber internals and mist eliminators shall be cleaned at intervals sufficient to prevent buildup of solids or other fouling.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

### III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall maintain a log documenting inspections, repairs, and maintenance as described in sections A.II.1 and A.II.2 above.

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

## III. Monitoring and/or Record Keeping Requirements (continued)

**2.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

d. the total duration of any visible 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 under item (d) above or continue the visible emission 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.

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

## IV. Reporting Requirements

**1.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

13.18 lbs/hr of PE

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

No testing is specifically required by this permit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A). Such testing may be requested at opacity levels less than those required by the visible particulate emission limit specified in section A.I.1.

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ingot Heat Fce. #34 (P051)

**Activity Description:** Flinn & Dreffein - 15.72 MMBTU/hr - Registration 10/10/80

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| ingot heat furnace #34 (15.72 mmBtu/hr) | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |
| | OAC rule 3745-18-06(E)(2) | 55.4 lbs/hr of sulfur dioxide (SO2) |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to particulate emissions, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The permittee shall burn only natural gas in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

### III. Monitoring and/or Record Keeping 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.

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

### IV. Reporting Requirements

**1.** 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.

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

## V. Testing Requirements

**1.** Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

**1.a** Emission Limitation:

55.4 lbs/hr of SO2

Applicable Compliance Method:

The permittee shall determine compliance with the above limit based upon multiplying the AP-42 emission factor for SO2 emissions (resulting from the operation of natural gas fuel burning equipment) by the maximum hourly natural gas consumption rate of the emissions unit. Therefore, the emission factor of 0.6 pound of SO2 produced per million cubic feet of natural gas fired shall be multiplied by the maximum hourly volume of natural gas fired in the furnace, in millions of cubic feet per hour, to calculate an SO2 emission rate in pounds per hour.

The above SO2 emission factor was obtained from AP-42, 5th Edition (revised 7/98), Chapter 1.4, Table 1.4-2

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** #7 Grinder (P054)

**Activity Description:** Midwest Grinder - 4230 - Fixed Hood

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Midwest Grinder #7 with five-module baghouse | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-17-11(B)(1) | 8.23 lbs/hr of particulate emissions (PE) from the baghouse. See A.I.2.b |
| | OAC rule 3745-31-05(A)(3) (PTI 17-403) | 4.07 tons of PE per year<br>0.05 grain of PE per dry standard cubic foot (gr of PE/dscf) of exhaust gases from the baghouse<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B), 3745-17-07(B), and 3745-17-08(B). |
| For waste baghouse dust collection and handling operations | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust (See section A.I.2.c.) |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall not be operated without the use of the dust collection system and baghouse.

**2.b** The allowable mass rate of particulate emissions was based on Table I of OAC rule 3745-17-11 and was determined to be 8.23 pounds per hour. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 8.23 lbs/hour, the permittee shall comply with the more stringent limitation.

**2. Additional Terms and Conditions (continued)**

**2.c** The permittee shall employ and properly maintain the lids and connecting piping or other comparable equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate any visible emissions of fugitive dust during the handling of the collected material.

## II. Operational Restrictions

**1.** Except as provided in the following sentence, the pressure drop across the baghouse or each individual module, which ever is applicable, shall be maintained within the range of 1 to 9 inches of water column while the emissions unit is in operation. This allowable operating parameter may be exceeded while the control equipment is in cleaning mode. A new pressure drop range shall be permissible if stack testing pursuant to section A.V.2 indicates complying emission rates at such new range.

[Authority Citations: OAC rule 3745-77-07(A)(1)]

**2.** PE from this emissions unit shall be captured and vented to the baghouse at a rate sufficient to minimize or eliminate fugitive emissions inside the building.

[Authority Citations: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse (or individual modules, whichever is applicable) while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis while the baghouse is in standard, non-cleaning mode.

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

**2.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

e. any corrective actions taken to 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 under item (d) above or continue the visible emission 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.

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

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

**2.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitations:

8.23 lbs/hr and 0.05 gr/dscf of PE from the baghouse

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

**1.b** Emission Limitation:

4.07 tpy of PE from the baghouse

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the tested hourly PE emission rate, in lbs/hr, by the annual hours of operation of this emissions unit, and then dividing by 2000 lbs/ton.

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

**1.c** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

## V. Testing Requirements (continued)

**1.d** Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and procedures in OAC rule 3745-17-03(B)(3).

[Authority Citation: OAC rule 3745-17-03(B)(3) and OAC rule 3745-77-07(C)(1)]

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

a. The emission testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable hourly PE rate and PE concentration.

c. The following test method shall be employed to demonstrate compliance with the allowable PE rate and PE concentration: Method 5 of 40 CFR, Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. A PE test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR, Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Southeast District Office's refusal to accept the results of the emission tests.

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the tests, 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 test shall be signed by the person or persons responsible for the test and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** #5 Grinder (P056)

**Activity Description:** Midwest Grinder - 62

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Fixed-hood Midwest Grinder #5 with five-module baghouse | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any baghouse stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule. |
| | OAC rule 3745-17-11(B)(1) | 6.89 lbs/hr of particulate emissions (PE) from the baghouse. See A.I.2.b. |
| For waste baghouse dust collection and handling operations | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust (See section A.I.2.c.) |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall not be operated without the use of the dust collection system and baghouse.

**2.b** The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 6.89 pounds per hour. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 6.89 lbs/hour, the permittee shall comply with the more stringent limitation.

**2.c** The permittee shall employ and properly maintain the lids and connecting piping or other comparable equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate visible emissions of fugitive dust during the handling of the collected material.

## II. Operational Restrictions

**1.** Except as provided in the following sentence, the pressure drop across the baghouse or each individual module, which ever is applicable, shall be maintained within the range of 0.5 to 9 inches of water column while the emissions unit is in operation. This allowable operating parameter may be exceeded while the control equipment is in cleaning mode. A new pressure drop range shall be permissible if stack testing pursuant to section A.V.2 indicates complying emission rates at such new range.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**2.** PE from this emissions unit shall be captured and vented to the baghouse at a rate sufficient to minimize or eliminate fugitive emissions inside the building.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse (or individual modules, whichever is applicable) while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis while the baghouse is in standard, non-cleaning mode.

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

**2.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

e. any corrective actions taken to 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 under item (d) above or continue the visible emission 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.

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

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

## IV. Reporting Requirements (continued)

**2.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

6.89 lbs/hr of PE

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

**1.b** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

**1.c** Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and procedures in OAC rule 3745-17-03(B)(3).

[Authority Citation: OAC rule 3745-17-03(B)(3) and OAC rule 3745-77-07(C)(1)]

## V. Testing Requirements (continued)

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

a. The emission testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE rate.

c. The following test method shall be employed to demonstrate compliance with the allowable PE rate: Method 5 of 40 CFR, Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office.

e. A PE test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR, Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Southeast District Office's refusal to accept the results of the emission tests.

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the tests, 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 test shall be signed by the person or persons responsible for the test and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** #6 Grinder (P057)

**Activity Description:** Midwest Grinder - 62 - Fixed Hood

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| fixed-hood Midwest Grinder #6 with five-module baghouse | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-17-11(B)(1) | 7.22 lbs/hr of particulate emissions (PE) from the baghouse. See A.I.2.b. |
| For waste baghouse dust collection and handling operations | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust (See section A.I.2.c.) |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall not be operated without the use of the dust collection system and baghouse.

**2.b** The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 7.22 pounds per hour. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 7.22 lbs/hour, the permittee shall comply with the more stringent limitation.

**2.c** The permittee shall employ and properly maintain the lids and connecting piping or other comparable equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate any visible emissions of fugitive dust during the handling of the collected material.

## II. Operational Restrictions

**1.** Except as provided in the following sentence, the pressure drop across the baghouse or each individual module, which ever is applicable, shall be maintained within the range of 0.5 to 9 inches of water column while the emissions unit is in operation. This allowable operating parameter may be exceeded while the control equipment is in cleaning mode. A new pressure drop range shall be permissible if stack testing pursuant to section A.V.2 indicates complying emission rates at such new range.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**2.** PE from this emissions unit shall be captured and vented to the baghouse at a rate sufficient to minimize or eliminate fugitive emissions inside the building.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse (or individual modules, whichever is applicable) while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis while the baghouse is in standard, non-cleaning mode.

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

**2.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

e. any corrective actions taken to 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 under item (d) above or continue the visible emission 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.

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

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

## IV. Reporting Requirements (continued)

**2.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

7.22 lbs/hr of PE

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

**1.b** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

**1.c** Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and procedures in OAC rule 3745-17-03(B)(3).

[Authority Citation: OAC rule 3745-17-03(B)(3) and OAC rule 3745-77-07(C)(1)]

## V. Testing Requirements (continued)

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

a. The emission testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE rate.

c. The following test method shall be employed to demonstrate compliance with the allowable PE rate: Method 5 of 40 CFR, Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. A PE test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR, Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Southeast District Office's refusal to accept the results of the emission tests.

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the tests, 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 test shall be signed by the person or persons responsible for the test and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Tysaman Grinder (P058)

**Activity Description:** Tysaman Grinder - Mark 50

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Tysaman Grinder with five-module baghouse | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-17-11(B)(1) | 6.6 lbs/hr of particulate emissions (PE) from the baghouse. See A.I.2.b. |
| For waste baghouse dust collection and handling operations | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust (See section A.I.2.c.) |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall not be operated without the use of the dust collection system and baghouse.

**2.b** The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 6.6 pounds per hour. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 6.6 lbs/hour, the permittee shall comply with the more stringent limitation.

**2.c** The permittee shall employ and properly maintain the lids and connecting piping or other comparable equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate any visible emissions of fugitive dust during the handling of the collected material.

## II. Operational Restrictions

**1.** Except as provided in the following sentence, the pressure drop across the baghouse or each individual module, which ever is applicable, shall be maintained within the range of 1 to 9 inches of water column while the emissions unit is in operation. This allowable operating parameter may be exceeded while the control equipment is in cleaning mode. A new pressure drop range shall be permissible if stack testing pursuant to V.2 indicates complying emission rates at such new range.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**2.** PE from this emissions unit shall be captured and vented to the baghouse at a rate sufficient to minimize or eliminate fugitive emissions inside the building.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse (or individual modules, whichever is applicable) while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis while the baghouse is in standard, non-cleaning mode.

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

**2.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

e. any corrective actions taken to 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 under item (d) above or continue the visible emission 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.

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

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

## IV. Reporting Requirements (continued)

**2.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

6.6 lbs/hr of PE

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

**1.b** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

**1.c** Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and procedures in OAC rule 3745-17-03(B)(3).

[Authority Citation: OAC rule 3745-17-03(B)(3) and OAC rule 3745-77-07(C)(1)]

## V. Testing Requirements (continued)

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

a. The emission testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE rate.

c. The following test method shall be employed to demonstrate compliance with the allowable PE rate: Method 5 of 40 CFR, Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. A PE test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR, Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Southeast District Office's refusal to accept the results of the emission tests.

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the tests, 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 test shall be signed by the person or persons responsible for the test and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Fox Grinder #1 (P059)

**Activity Description:** Fox Grinder - 1895A

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Fox Grinder #1 with baghouse | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-17-11(B)(1) | See A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 17-516) | 0.029 gr PE/dscf of exhaust gases from the baghouse<br>4.28 lbs/hr of particulate emissions (PE) from the baghouse<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B), 3745-17-07(B), and 3745-17-08(B). |
| For fugitive emissions from grinding room and waste baghouse dust handling | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust (See section A.I.2.c.) |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall not be operated without the use of the dust collection system and baghouse.

**2.b** The particulate emission limitation required by this applicable rule is less stringent than the particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions (continued)**

**2.c** The permittee shall employ and properly maintain the lids and connecting piping or other comparable equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate any visible emissions of fugitive dust during the handling of the collected material.

## II. Operational Restrictions

**1.** PE from this emissions unit shall be captured and vented to the baghouse at a rate sufficient to minimize or eliminate fugitive emissions inside the building.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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

**2.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

e. any corrective actions taken to 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 under item (d) above or continue the visible emission 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.

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

## IV. Reporting Requirements

**1.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

**2.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

4.28 lbs/hr and 0.029 gr/dscf of PE from the baghouse

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

**1.b** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

**1.c** Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and procedures in OAC rule 3745-17-03(B)(3).

[Authority Citation: OAC rule 3745-17-03(B)(3) and OAC rule 3745-77-07(C)(1)]

## V. Testing Requirements (continued)

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

a. The emission testing shall be conducted within 6 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable hourly PE rate and PE concentration.

c. The following test method shall be employed to demonstrate compliance with the allowable PE rate and PE concentration: Method 5 of 40 CFR, Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. A PE test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR, Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Southeast District Office's refusal to accept the results of the emission tests.

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the tests, 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 test shall be signed by the person or persons responsible for the test and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Fox Grinder #2 (P060)

**Activity Description:** Fox Grinder - 1895A

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Fox Grinder #2 with baghouse | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-17-11(B)(1) | See A.I.2.b. |
| | OAC rule 3745-31-05 (PTI 17-516) | 0.029 gr PE/dscf of exhaust gases from the baghouse<br>4.28 lbs/hr of particulate emissions (PE) from the baghouse<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B), 3745-17-07(B), and 3745-17-08(B). |
| For fugitive emissions from grinding room and waste baghouse dust handling | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust (See section A.I.2.c.) |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall not be operated without the use of the dust collection system and baghouse.

**2.b** The particulate emission limitation required by this applicable rule is less stringent than the particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions (continued)**

**2.c** The permittee shall employ and properly maintain the lids and connecting piping or other comparable equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate any visible emissions of fugitive dust during the handling of the collected material.

## II. Operational Restrictions

**1.** PE from this emissions unit shall be captured and vented to the baghouse at a rate sufficient to minimize or eliminate fugitive emissions inside the building.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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

**2.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

e. any corrective actions taken to 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 under item (d) above or continue the visible emission 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.

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

## IV. Reporting Requirements

**1.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

**2.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

4.28 lbs/hr and 0.029 gr/dscf of PE from the baghouse

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

**1.b** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

**1.c** Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and procedures in OAC rule 3745-17-03(B)(3).

[Authority Citation: OAC rule 3745-17-03(B)(3) and OAC rule 3745-77-07(C)(1)]

## V. Testing Requirements (continued)

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

a. The emission testing shall be conducted within 6 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable hourly PE rate and PE concentration.

c. The following test method shall be employed to demonstrate compliance with the allowable PE rate and PE concentration: Method 5 of 40 CFR, Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office.

e. A PE test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR, Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Southeast District Office's refusal to accept the results of the emission tests.

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the tests, 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 test shall be signed by the person or persons responsible for the test and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Reheat Furnace #11 (P062)

**Activity Description:** Forge Box Furnace - Pittsburgh Industrial Furnace Co. - 10 MMBtu/hr

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| natural gas-fired reheat furnace # 11 (10 mmBtu/hr) | OAC rule 3745-31-05(A)(3) (PTI 06-91518) | Particulate emissions (PE) shall not exceed 0.020 lb/hr and 0.085 tpy.<br><br>Sulfur dioxide (SO2) emissions shall not exceed 0.0058 lb/hr and 0.03 tpy.<br><br>Volatile organic compound (VOC) emissions shall not exceed 0.055 lb/hr and 0.24 tpy.<br><br>Nitrogen oxides (NOx) emissions shall not exceed 0.98 lb/hr and 4.30 tpy.<br><br>Carbon monoxide (CO) emissions shall not exceed 0.83 lb/hr and 3.61 tpy.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B), and 3745-18-06(E). |
| | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |
| | OAC rule 3745-18-06(E)(2) | 55.4 lbs/hr of sulfur dioxide |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to particulate emissions, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

**2.c** The emission limitations in section A.I.1 were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to specify record keeping and/or reporting requirements to ensure compliance with these limits.

**II. Operational Restrictions**

**1.** The permittee shall burn only natural gas in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**III. Monitoring and/or Record Keeping 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**IV. Reporting Requirements**

**1.** 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**V. Testing Requirements**

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

**1.a** Emission Limitation:

55.4 lbs/hr SO2

Applicable Compliance Method:

Compliance may be determined by dividing the SO2 emission factor of 0.6 lb/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 10 mmBtu/hr.

The SO2 emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 6.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

0.020 lb/hr of PE

Applicable Compliance Method:

Compliance may be determined by dividing the particulate emission factor of 1.9 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 10 mmBtu/hr.

The particulate emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 5.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**1.c** Emission Limitation:

0.085 tpy of PE

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.020 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**1.d** Emission Limitation:

0.98 lb/hr of NOx

Applicable Compliance Method:

Compliance may be determined by dividing the NOx emission factor of 100 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 10 mmBtu/hr.

The NOx emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 7.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**1.e** Emission Limitation:

4.30 tpy of NOx

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable NOx limitation (0.98 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## V. Testing Requirements (continued)

**1.f** Emission Limitation:

0.83 lb/hr of CO

Applicable Compliance Method:

Compliance may be determined by dividing the CO emission factor of 84 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 10 mmBtu/hr.

The CO emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 10.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**1.g** Emission Limitation:

3.61 tpy of CO

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable CO limitation (0.83 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**1.h** Emission Limitation:

0.0058 lb/hr of SO2

Applicable Compliance Method:

Compliance may be determined by dividing the SO2 emission factor of 0.6 lb/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 10 mmBtu/hr.

The SO2 emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 6.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**1.i** Emission Limitation:

0.03 tpy of SO2

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable SO2 limitation (0.0058 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## V. Testing Requirements (continued)

**1.j** Emission Limitation:

0.055 lb/hr of VOC

Applicable Compliance Method:

Compliance may be determined by dividing the VOC emission factor of 5.5 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 10 mmBtu/hr.

The VOC emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 18 or 25.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**1.k** Emission Limitation:

0.24 tpy of VOC

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC limitation (0.055 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Reheat Furnace #12 (P063)

**Activity Description:** Forge Box Furnace - Pittsburgh Industrial Furnace Co. - 10 MMBtu/hr

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| natural gas-fired reheat furnace # 12 (10 mmBtu/hr) | OAC rule 3745-31-05(A)(3) (PTI 06-91518) | Particulate emissions (PE) shall not exceed 0.020 lb/hr and 0.085 tpy.<br><br>Sulfur dioxide (SO2) emissions shall not exceed 0.0058 lb/hr and 0.03 tpy.<br><br>Volatile organic compound (VOC) emissions shall not exceed 0.055 lb/hr and 0.24 tpy.<br><br>Nitrogen oxides (NOx) emissions shall not exceed 0.98 lb/hr and 4.30 tpy.<br><br>Carbon monoxide (CO) emissions shall not exceed 0.83 lb/hr and 3.61 tpy.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B), and 3745-18-06(E). |
| | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |
| | OAC rule 3745-18-06(E)(2) | 55.4 lbs/hr of sulfur dioxide |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to particulate emissions, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

**2.c** The emission limitations in section A.I.1 were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to specify record keeping and/or reporting requirements to ensure compliance with these limits.

## II. Operational Restrictions

**1.** The permittee shall burn only natural gas in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## IV. Reporting Requirements

**1.** 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

**1.a** Emission Limitation:

55.4 lbs/hr SO2

Applicable Compliance Method:

Compliance may be determined by dividing the SO2 emission factor of 0.6 lb/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 10 mmBtu/hr.

The SO2 emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 6.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

0.020 lb/hr of PE

Applicable Compliance Method:

Compliance may be determined by dividing the particulate emission factor of 1.9 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 10 mmBtu/hr.

The particulate emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 5.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**1.c** Emission Limitation:

0.085 tpy of PE

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.020 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**1.d** Emission Limitation:

0.98 lb/hr of NOx

Applicable Compliance Method:

Compliance may be determined by dividing the NOx emission factor of 100 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 10 mmBtu/hr.

The NOx emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 7.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**1.e** Emission Limitation:

4.30 tpy of NOx

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable NOx limitation (0.98 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## V. Testing Requirements (continued)

**1.f** Emission Limitation:

0.83 lb/hr of CO

Applicable Compliance Method:

Compliance may be determined by dividing the CO emission factor of 84 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 10 mmBtu/hr.

The CO emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 10.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**1.g** Emission Limitation:

3.61 tpy of CO

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable CO limitation (0.83 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**1.h** Emission Limitation:

0.0058 lb/hr of SO2

Applicable Compliance Method:

Compliance may be determined by dividing the SO2 emission factor of 0.6 lb/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 10 mmBtu/hr.

The SO2 emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 6.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**1.i** Emission Limitation:

0.03 tpy of SO2

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable SO2 limitation (0.0058 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## V. Testing Requirements (continued)

**1.j** Emission Limitation:

0.055 lb/hr of VOC

Applicable Compliance Method:

Compliance may be determined by dividing the VOC emission factor of 5.5 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 10 mmBtu/hr.

The VOC emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 18 or 25.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**1.k** Emission Limitation:

0.24 tpy of VOC

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC limitation (0.055 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** #8 Midwest Grinder (P067)

**Activity Description:** Midwest Grinder

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| #8 Midwest Grinder fixed hard wheel movable table surface grinder with three-module baghouse | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-17-11(B)(1) | See A.I.2.b below. |
| | OAC rule 3745-31-05(A)(3) (PTI 17-1585) | 0.69 lb/hr of particulate emissions (PE) from the baghouse; 3.0 tons of PE per year from the baghouse<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B), 3745-17-07(B), and 3745-17-08(B). |
| For waste baghouse dust collection and handling operations | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust (See section A.I.2.c.) |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall not be operated without the use of the dust collection system and baghouse.

**2.b** The particulate emission limitation required by this applicable rule is less stringent than the particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2.c** The permittee shall employ and properly maintain the lids and connecting piping or other comparable or equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate any visible emissions of fugitive dust during the handling of the collected material.

## II. Operational Restrictions

**1.** Except as provided in the following sentence, the pressure drop across the baghouse or each individual module, which ever is applicable, shall be maintained within the range of 0.5 to 9 inches of water column while the emissions unit is in operation. This allowable operating parameter may be exceeded while the control equipment is in cleaning mode. A new pressure drop range shall be permissible if stack testing pursuant to V.2 indicates complying emission rates at such new range.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**2.** The permittee shall maintain the PE collection system for this emission unit in order to minimize or eliminate fugitive emissions from escaping the collection point.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse (or individual modules, whichever is applicable) while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis while the baghouse is in standard, non-cleaning mode.

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

**2.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

e. any corrective actions taken to 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 under item (d) above or continue the visible emission 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.

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

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

## IV. Reporting Requirements (continued)

**2.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

**1.a** Emission Limitation:

0.69 lb/hr of PE from the baghouse

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

**1.b** Emission Limitation:

3.0 tpy of PE from the baghouse

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the tested hourly PE emission rate, in lbs/hr, by the annual hours of operation of this emissions unit, and then dividing by 2000 lbs/ton.

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

**1.c** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

**1.d** Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and procedures in OAC rule 3745-17-03(B)(3).

[Authority Citation: OAC rule 3745-17-03(B)(3) and OAC rule 3745-77-07(C)(1)]

## V. Testing Requirements (continued)

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

a. The emission testing shall be conducted within 6 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable hourly PE rate and PE concentration.

c. The following test method shall be employed to demonstrate compliance with the allowable PE rate and PE concentration: Method 5 of 40 CFR, Part 60, Appendix A.

d. The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Southeast District Office's refusal to accept the results of the emission tests.

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the tests, 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 test shall be signed by the person or persons responsible for the test and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ingot Heating Furnace No. 1 (P069)

**Activity Description:** Natural gas fire batch furnace - 25 MMBtu/hr

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| ingot heat furnace #1 (25 mmBtu/hr), controlled with a low NOx burner | OAC rule 3745-31-05(A)(3) (PTI 06-91602) | Particulate emissions (PE) shall not exceed 0.047 lb/hr.<br><br>Sulfur dioxide (SO2) emissions shall not exceed 0.016 lb/hr.<br><br>Volatile organic compound (VOC) emissions shall not exceed 0.135 lb/hr.<br><br>Nitrogen oxides (NOx) emissions shall not exceed 1.22 lbs/hr.<br><br>Carbon monoxide (CO) emissions shall not exceed 2.06 lbs/hr.<br><br>Visible PE from any stack associated with this emissions unit shall not exceed 5% opacity, as a 6-minute average.<br><br>See sections A.I.2.d, A.I.2.e and A.I.2.f below. |
| | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-08 | The emission limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | OAC rule 3745-18-06(E)(2) | The emission limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3). |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to PE, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no PE limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because there is no applicable PE limitation in OAC rule 3745-17-11.

**2.c** The emission limitations in A.I.1 are based on the maximum usage; thus, hourly usage record keeping is not required.

**2.d** The individual emissions of PE, SO2, CO, VOC and NOx from each of emissions units P069 through P074 shall not exceed the following:

PE = 0.20 tpy;
SO2 = 0.07 tpy;
CO = 9.01 tpy;
VOC = 0.59 tpy; and
NOx = 5.37 tpy.

**2.e** The total annual emissions of PE, SO2, CO, VOC and NOx from emissions units P069 through P074, combined, shall not exceed the following:

PE = 0.37 tpy;
SO2 = 0.12 tpy;
CO = 16.23 tpy;
VOC = 1.06 tpy; and
NOx = 9.66 tpy.

**2.f** The natural gas usage for emissions units P069 through P074, combined, shall not exceed a total of 382,718 thousand cubic feet per year, as a rolling, 12-month summation.

## II. Operational Restrictions

**1.** The permittee shall burn only natural gas as fuel in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## III. Monitoring and/or Record Keeping Requirements (continued)

**2.** The permittee shall collect and record the following information each month for emissions units P069 through P074, combined:

a. the total volume of natural gas employed, in thousands of cubic feet; and

b. the total volume of natural gas employed, as a rolling, 12-month summation, in thousands of cubic feet.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## IV. Reporting Requirements

**1.** 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**2.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month limitation for natural gas usage for emissions units P069 through P074, combined.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**3.** The permittee shall submit annual reports that specify the total NOx, SO2, CO, VOC and PE emissions from emissions units P069 through P074, combined, for the previous calendar year. These reports shall be submitted by January 31 of each year.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements

**1.** Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

0.047 lb/hr of PE

Applicable Compliance Method:

Compliance may be determined by dividing the particulate emission factor of 1.9 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The particulate emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 5.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

0.20 tpy of PE

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.047 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.c** Emission Limitation:

0.37 tpy of PE from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.047 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.d** Emission Limitation:

1.22 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be determined by dividing the NOx emission factor of 50 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The NOx emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 7.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.e** Emission Limitation:

5.37 tpy of NOx

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable NOx limitation (1.22 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.f** Emission Limitation:

9.66 tpy of NOx from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable NOx limitation (1.22 lbs/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.g** Emission Limitation:

2.06 lbs/hr of CO

Applicable Compliance Method:

Compliance may be determined by dividing the CO emission factor of 84 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The CO emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 10.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.h** Emission Limitation:

9.01 tpy of CO

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable CO limitation (2.06 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.i** Emission Limitation:

16.23 tpy of CO from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable CO limitation (2.06 lbs/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.j** Emission Limitation:

0.016 lb/hr of SO2

Applicable Compliance Method:

Compliance may be determined by dividing the SO2 emission factor of 0.6 lb/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The SO2 emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 6.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.k** Emission Limitation:

0.07 tpy of SO2

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable SO2 limitation (0.016 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.l** Emission Limitation:

0.12 tpy of SO2 from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable SO2 limitation (0.016 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.m** Emission Limitation:

0.135 lb/hr of VOC

Applicable Compliance Method:

Compliance may be determined by dividing the VOC emission factor of 5.5 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The VOC emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 18 or 25.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.n** Emission Limitation:

0.59 tpy of VOC

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC limitation (0.135 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.o** Emission Limitation:

1.06 tpy of VOC from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC limitation (0.135 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.p** Emission Limitation:

Visible PE shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in 40 CFR Part 60, Method 9.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**2.** Compliance with the annual natural gas usage limitation in section A.1.2.e of these terms and conditions shall be based upon the rolling, 12-month summations of the monthly gas usages recorded pursuant to section A.III.2.c.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ingot Heating Furnace No. 2 (P070)

**Activity Description:** Natural gas fire batch furnace - 25 MMBtu/hr

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| ingot heat furnace #2 (25 mmBtu/hr), controlled with a low NOx burner | OAC rule 3745-31-05(A)(3) (PTI 06-91602) | Particulate emissions (PE) shall not exceed 0.047 lb/hr.<br><br>Sulfur dioxide (SO2) emissions shall not exceed 0.016 lb/hr.<br><br>Volatile organic compound (VOC) emissions shall not exceed 0.135 lb/hr.<br><br>Nitrogen oxides (NOx) emissions shall not exceed 1.22 lbs/hr.<br><br>Carbon monoxide (CO) emissions shall not exceed 2.06 lbs/hr.<br><br>Visible PE from any stack associated with this emissions unit shall not exceed 5% opacity, as a 6-minute average.<br><br>See sections A.I.2.d, A.I.2.e and A.I.2.f below. |
| | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-08 | The emission limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | OAC rule 3745-18-06(E)(2) | The emission limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3). |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to PE, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no PE limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because there is no applicable PE limitation in OAC rule 3745-17-11.

**2.c** The emission limitations in A.I.1 are based on the maximum usage; thus, hourly usage record keeping is not required.

**2.d** The individual emissions of PE, SO2, CO, VOC and NOx from each of emissions units P069 through P074 shall not exceed the following:

PE = 0.20 tpy;
SO2 = 0.07 tpy;
CO = 9.01 tpy;
VOC = 0.59 tpy; and
NOx = 5.37 tpy.

**2.e** The total annual emissions of PE, SO2, CO, VOC and NOx from emissions units P069 through P074, combined, shall not exceed the following:

PE = 0.37 tpy;
SO2 = 0.12 tpy;
CO = 16.23 tpy;
VOC = 1.06 tpy; and
NOx = 9.66 tpy.

**2.f** The natural gas usage for emissions units P069 through P074, combined, shall not exceed a total of 382,718 thousand cubic feet per year, as a rolling, 12-month summation.

## II. Operational Restrictions

**1.** The permittee shall burn only natural gas as fuel in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## III. Monitoring and/or Record Keeping Requirements (continued)

**2.** The permittee shall collect and record the following information each month for emissions units P069 through P074, combined:

a. the total volume of natural gas employed, in thousands of cubic feet; and

b. the total volume of natural gas employed, as a rolling, 12-month summation, in thousands of cubic feet.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## IV. Reporting Requirements

**1.** 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**2.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month limitation for natural gas usage for emissions units P069 through P074, combined.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**3.** The permittee shall submit annual reports that specify the total NOx, SO2, CO, VOC and PE emissions from emissions units P069 through P074, combined, for the previous calendar year. These reports shall be submitted by January 31 of each year.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements

**1.** Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

0.047 lb/hr of PE

Applicable Compliance Method:

Compliance may be determined by dividing the particulate emission factor of 1.9 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The particulate emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 5.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

0.20 tpy of PE

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.047 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.c** Emission Limitation:

0.37 tpy of PE from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.047 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.d** Emission Limitation:

1.22 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be determined by dividing the NOx emission factor of 50 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The NOx emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 7.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.e** Emission Limitation:

5.37 tpy of NOx

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable NOx limitation (1.22 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.f** Emission Limitation:

9.66 tpy of NOx from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable NOx limitation (1.22 lbs/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.g** Emission Limitation:

2.06 lbs/hr of CO

Applicable Compliance Method:

Compliance may be determined by dividing the CO emission factor of 84 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The CO emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 10.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.h** Emission Limitation:

9.01 tpy of CO

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable CO limitation (2.06 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.i** Emission Limitation:

16.23 tpy of CO from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable CO limitation (2.06 lbs/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.j** Emission Limitation:

0.016 lb/hr of SO2

Applicable Compliance Method:

Compliance may be determined by dividing the SO2 emission factor of 0.6 lb/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The SO2 emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 6.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.k** Emission Limitation:

0.07 tpy of SO2

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable SO2 limitation (0.016 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.l** Emission Limitation:

0.12 tpy of SO2 from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable SO2 limitation (0.016 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.m** Emission Limitation:

0.135 lb/hr of VOC

Applicable Compliance Method:

Compliance may be determined by dividing the VOC emission factor of 5.5 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The VOC emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 18 or 25.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.n** Emission Limitation:

0.59 tpy of VOC

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC limitation (0.135 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.o** Emission Limitation:

1.06 tpy of VOC from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC limitation (0.135 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.p** Emission Limitation:

Visible PE shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in 40 CFR Part 60, Method 9.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**2.** Compliance with the annual natural gas usage limitation in section A.1.2.e of these terms and conditions shall be based upon the rolling, 12-month summations of the monthly gas usages recorded pursuant to section A.III.2.c.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ingot Heating Furnace No. 3 (P071)

**Activity Description:** Natural gas fire batch furnace - 25 MMBtu/hr

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| ingot heat furnace #3 (25 mmBtu/hr), controlled with a low NOx burner | OAC rule 3745-31-05(A)(3) (PTI 06-91602) | Particulate emissions (PE) shall not exceed 0.047 lb/hr.<br><br>Sulfur dioxide (SO2) emissions shall not exceed 0.016 lb/hr.<br><br>Volatile organic compound (VOC) emissions shall not exceed 0.135 lb/hr.<br><br>Nitrogen oxides (NOx) emissions shall not exceed 1.22 lbs/hr.<br><br>Carbon monoxide (CO) emissions shall not exceed 2.06 lbs/hr.<br><br>Visible PE from any stack associated with this emissions unit shall not exceed 5% opacity, as a 6-minute average.<br><br>See sections A.I.2.d, A.I.2.e and A.I.2.f below. |
| | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-08 | The emission limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | OAC rule 3745-18-06(E)(2) | The emission limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3). |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to PE, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no PE limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because there is no applicable PE limitation in OAC rule 3745-17-11.

**2.c** The emission limitations in A.I.1 are based on the maximum usage; thus, hourly usage record keeping is not required.

**2.d** The individual emissions of PE, SO2, CO, VOC and NOx from each of emissions units P069 through P074 shall not exceed the following:

PE = 0.20 tpy;
SO2 = 0.07 tpy;
CO = 9.01 tpy;
VOC = 0.59 tpy; and
NOx = 5.37 tpy.

**2.e** The total annual emissions of PE, SO2, CO, VOC and NOx from emissions units P069 through P074, combined, shall not exceed the following:

PE = 0.37 tpy;
SO2 = 0.12 tpy;
CO = 16.23 tpy;
VOC = 1.06 tpy; and
NOx = 9.66 tpy.

**2.f** The natural gas usage for emissions units P069 through P074, combined, shall not exceed a total of 382,718 thousand cubic feet per year, as a rolling, 12-month summation.

## II. Operational Restrictions

**1.** The permittee shall burn only natural gas as fuel in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## III. Monitoring and/or Record Keeping Requirements (continued)

**2.** The permittee shall collect and record the following information each month for emissions units P069 through P074, combined:

a. the total volume of natural gas employed, in thousands of cubic feet; and

b. the total volume of natural gas employed, as a rolling, 12-month summation, in thousands of cubic feet.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## IV. Reporting Requirements

**1.** 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**2.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month limitation for natural gas usage for emissions units P069 through P074, combined.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**3.** The permittee shall submit annual reports that specify the total NOx, SO2, CO, VOC and PE emissions from emissions units P069 through P074, combined, for the previous calendar year. These reports shall be submitted by January 31 of each year.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements

**1.** Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

0.047 lb/hr of PE

Applicable Compliance Method:

Compliance may be determined by dividing the particulate emission factor of 1.9 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The particulate emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 5.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

0.20 tpy of PE

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.047 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.c** Emission Limitation:

0.37 tpy of PE from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.047 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.d** Emission Limitation:

1.22 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be determined by dividing the NOx emission factor of 50 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The NOx emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 7.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.e** Emission Limitation:

5.37 tpy of NOx

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable NOx limitation (1.22 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.f** Emission Limitation:

9.66 tpy of NOx from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable NOx limitation (1.22 lbs/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.g** Emission Limitation:

2.06 lbs/hr of CO

Applicable Compliance Method:

Compliance may be determined by dividing the CO emission factor of 84 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The CO emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 10.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.h** Emission Limitation:

9.01 tpy of CO

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable CO limitation (2.06 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.i** Emission Limitation:

16.23 tpy of CO from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable CO limitation (2.06 lbs/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.j** Emission Limitation:

0.016 lb/hr of SO2

Applicable Compliance Method:

Compliance may be determined by dividing the SO2 emission factor of 0.6 lb/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The SO2 emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 6.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.k** Emission Limitation:

0.07 tpy of SO2

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable SO2 limitation (0.016 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.l** Emission Limitation:

0.12 tpy of SO2 from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable SO2 limitation (0.016 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.m** Emission Limitation:

0.135 lb/hr of VOC

Applicable Compliance Method:

Compliance may be determined by dividing the VOC emission factor of 5.5 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The VOC emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 18 or 25.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.n** Emission Limitation:

0.59 tpy of VOC

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC limitation (0.135 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.o** Emission Limitation:

1.06 tpy of VOC from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC limitation (0.135 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.p** Emission Limitation:

Visible PE shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in 40 CFR Part 60, Method 9.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**2.** Compliance with the annual natural gas usage limitation in section A.1.2.e of these terms and conditions shall be based upon the rolling, 12-month summations of the monthly gas usages recorded pursuant to section A.III.2.c.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ingot Heating Furnace No. 4 (P072)

**Activity Description:** Natural gas fire batch furnace - 25 MMBtu/hr

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| ingot heat furnace #4 (25 mmBtu/hr), controlled with a low NOx burner | OAC rule 3745-31-05(A)(3) (PTI 06-91602) | Particulate emissions (PE) shall not exceed 0.047 lb/hr.<br><br>Sulfur dioxide (SO2) emissions shall not exceed 0.016 lb/hr.<br><br>Volatile organic compound (VOC) emissions shall not exceed 0.135 lb/hr.<br><br>Nitrogen oxides (NOx) emissions shall not exceed 1.22 lbs/hr.<br><br>Carbon monoxide (CO) emissions shall not exceed 2.06 lbs/hr.<br><br>Visible PE from any stack associated with this emissions unit shall not exceed 5% opacity, as a 6-minute average.<br><br>See sections A.I.2.d, A.I.2.e and A.I.2.f below. |
| | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-08 | The emission limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | OAC rule 3745-18-06(E)(2) | The emission limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3). |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to PE, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no PE limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because there is no applicable PE limitation in OAC rule 3745-17-11.

**2.c** The emission limitations in A.I.1 are based on the maximum usage; thus, hourly usage record keeping is not required.

**2.d** The individual emissions of PE, SO2, CO, VOC and NOx from each of emissions units P069 through P074 shall not exceed the following:

PE = 0.20 tpy;
SO2 = 0.07 tpy;
CO = 9.01 tpy;
VOC = 0.59 tpy; and
NOx = 5.37 tpy.

**2.e** The total annual emissions of PE, SO2, CO, VOC and NOx from emissions units P069 through P074, combined, shall not exceed the following:

PE = 0.37 tpy;
SO2 = 0.12 tpy;
CO = 16.23 tpy;
VOC = 1.06 tpy; and
NOx = 9.66 tpy.

**2.f** The natural gas usage for emissions units P069 through P074, combined, shall not exceed a total of 382,718 thousand cubic feet per year, as a rolling, 12-month summation.

## II. Operational Restrictions

**1.** The permittee shall burn only natural gas as fuel in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## III. Monitoring and/or Record Keeping Requirements (continued)

**2.** The permittee shall collect and record the following information each month for emissions units P069 through P074, combined:

a. the total volume of natural gas employed, in thousands of cubic feet; and

b. the total volume of natural gas employed, as a rolling, 12-month summation, in thousands of cubic feet.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## IV. Reporting Requirements

**1.** 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**2.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month limitation for natural gas usage for emissions units P069 through P074, combined.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**3.** The permittee shall submit annual reports that specify the total NOx, SO2, CO, VOC and PE emissions from emissions units P069 through P074, combined, for the previous calendar year. These reports shall be submitted by January 31 of each year.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements

**1.** Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

0.047 lb/hr of PE

Applicable Compliance Method:

Compliance may be determined by dividing the particulate emission factor of 1.9 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The particulate emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 5.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

0.20 tpy of PE

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.047 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.c** Emission Limitation:

0.37 tpy of PE from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.047 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.d** Emission Limitation:

1.22 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be determined by dividing the NOx emission factor of 50 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The NOx emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 7.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.e** Emission Limitation:

5.37 tpy of NOx

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable NOx limitation (1.22 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.f** Emission Limitation:

9.66 tpy of NOx from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable NOx limitation (1.22 lbs/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.g** Emission Limitation:

2.06 lbs/hr of CO

Applicable Compliance Method:

Compliance may be determined by dividing the CO emission factor of 84 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The CO emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 10.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.h** Emission Limitation:

9.01 tpy of CO

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable CO limitation (2.06 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.i** Emission Limitation:

16.23 tpy of CO from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable CO limitation (2.06 lbs/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.j** Emission Limitation:

0.016 lb/hr of SO2

Applicable Compliance Method:

Compliance may be determined by dividing the SO2 emission factor of 0.6 lb/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The SO2 emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 6.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.k** Emission Limitation:

0.07 tpy of SO2

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable SO2 limitation (0.016 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.l** Emission Limitation:

0.12 tpy of SO2 from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable SO2 limitation (0.016 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.m** Emission Limitation:

0.135 lb/hr of VOC

Applicable Compliance Method:

Compliance may be determined by dividing the VOC emission factor of 5.5 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The VOC emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 18 or 25.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.n** Emission Limitation:

0.59 tpy of VOC

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC limitation (0.135 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.o** Emission Limitation:

1.06 tpy of VOC from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC limitation (0.135 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.p** Emission Limitation:

Visible PE shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in 40 CFR Part 60, Method 9.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**2.** Compliance with the annual natural gas usage limitation in section A.1.2.e of these terms and conditions shall be based upon the rolling, 12-month summations of the monthly gas usages recorded pursuant to section A.III.2.c.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ingot Heating Furnace No. 5 (P073)

**Activity Description:** Natural gas fire batch furnace - 25 MMBtu/hr

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| ingot heat furnace #5 (25 mmBtu/hr), controlled with a low NOx burner | OAC rule 3745-31-05(A)(3) (PTI 06-91602) | Particulate emissions (PE) shall not exceed 0.047 lb/hr.<br><br>Sulfur dioxide (SO2) emissions shall not exceed 0.016 lb/hr.<br><br>Volatile organic compound (VOC) emissions shall not exceed 0.135 lb/hr.<br><br>Nitrogen oxides (NOx) emissions shall not exceed 1.22 lbs/hr.<br><br>Carbon monoxide (CO) emissions shall not exceed 2.06 lbs/hr.<br><br>Visible PE from any stack associated with this emissions unit shall not exceed 5% opacity, as a 6-minute average.<br><br>See sections A.I.2.d, A.I.2.e and A.I.2.f below. |
| | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-08 | The emission limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | OAC rule 3745-18-06(E)(2) | The emission limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3). |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to PE, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no PE limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because there is no applicable PE limitation in OAC rule 3745-17-11.

**2.c** The emission limitations in A.I.1 are based on the maximum usage; thus, hourly usage record keeping is not required.

**2.d** The individual emissions of PE, SO2, CO, VOC and NOx from each of emissions units P069 through P074 shall not exceed the following:

PE = 0.20 tpy;
SO2 = 0.07 tpy;
CO = 9.01 tpy;
VOC = 0.59 tpy; and
NOx = 5.37 tpy.

**2.e** The total annual emissions of PE, SO2, CO, VOC and NOx from emissions units P069 through P074, combined, shall not exceed the following:

PE = 0.37 tpy;
SO2 = 0.12 tpy;
CO = 16.23 tpy;
VOC = 1.06 tpy; and
NOx = 9.66 tpy.

**2.f** The natural gas usage for emissions units P069 through P074, combined, shall not exceed a total of 382,718 thousand cubic feet per year, as a rolling, 12-month summation.

## II. Operational Restrictions

**1.** The permittee shall burn only natural gas as fuel in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## III. Monitoring and/or Record Keeping Requirements (continued)

**2.** The permittee shall collect and record the following information each month for emissions units P069 through P074, combined:

a. the total volume of natural gas employed, in thousands of cubic feet; and

b. the total volume of natural gas employed, as a rolling, 12-month summation, in thousands of cubic feet.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## IV. Reporting Requirements

**1.** 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**2.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month limitation for natural gas usage for emissions units P069 through P074, combined.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**3.** The permittee shall submit annual reports that specify the total NOx, SO2, CO, VOC and PE emissions from emissions units P069 through P074, combined, for the previous calendar year. These reports shall be submitted by January 31 of each year.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements

**1.** Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

0.047 lb/hr of PE

Applicable Compliance Method:

Compliance may be determined by dividing the particulate emission factor of 1.9 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The particulate emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 5.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

0.20 tpy of PE

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.047 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.c** Emission Limitation:

0.37 tpy of PE from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.047 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.d** Emission Limitation:

1.22 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be determined by dividing the NOx emission factor of 50 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The NOx emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 7.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.e** Emission Limitation:

5.37 tpy of NOx

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable NOx limitation (1.22 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.f** Emission Limitation:

9.66 tpy of NOx from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable NOx limitation (1.22 lbs/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.g** Emission Limitation:

2.06 lbs/hr of CO

Applicable Compliance Method:

Compliance may be determined by dividing the CO emission factor of 84 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The CO emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 10.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.h** Emission Limitation:

9.01 tpy of CO

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable CO limitation (2.06 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.i** Emission Limitation:

16.23 tpy of CO from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable CO limitation (2.06 lbs/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.j** Emission Limitation:

0.016 lb/hr of SO2

Applicable Compliance Method:

Compliance may be determined by dividing the SO2 emission factor of 0.6 lb/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The SO2 emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 6.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.k** Emission Limitation:

0.07 tpy of SO2

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable SO2 limitation (0.016 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.l** Emission Limitation:

0.12 tpy of SO2 from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable SO2 limitation (0.016 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.m** Emission Limitation:

0.135 lb/hr of VOC

Applicable Compliance Method:

Compliance may be determined by dividing the VOC emission factor of 5.5 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The VOC emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 18 or 25.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.n** Emission Limitation:

0.59 tpy of VOC

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC limitation (0.135 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.o** Emission Limitation:

1.06 tpy of VOC from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC limitation (0.135 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.p** Emission Limitation:

Visible PE shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in 40 CFR Part 60, Method 9.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**2.** Compliance with the annual natural gas usage limitation in section A.1.2.e of these terms and conditions shall be based upon the rolling, 12-month summations of the monthly gas usages recorded pursuant to section A.III.2.c.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ingot Heating Furnace No. 6 (P074)

**Activity Description:** Natural gas fire batch furnace - 25 MMBtu/hr

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| ingot heat furnace #6 (25 mmBtu/hr), controlled with a low NOx burner | OAC rule 3745-31-05(A)(3) (PTI 06-91602) | Particulate emissions (PE) shall not exceed 0.047 lb/hr.<br><br>Sulfur dioxide (SO2) emissions shall not exceed 0.016 lb/hr.<br><br>Volatile organic compound (VOC) emissions shall not exceed 0.135 lb/hr.<br><br>Nitrogen oxides (NOx) emissions shall not exceed 1.22 lbs/hr.<br><br>Carbon monoxide (CO) emissions shall not exceed 2.06 lbs/hr.<br><br>Visible PE from any stack associated with this emissions unit shall not exceed 5% opacity, as a 6-minute average.<br><br>See sections A.I.2.d, A.I.2.e and A.I.2.f below. |
| | OAC rule 3745-17-07(A)(1) | none (refer to section A.I.2.b of the terms and conditions of the permit) |
| | OAC rule 3745-17-08 | The emission limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-11(B)(1) | none (refer to section A.I.2.a of terms and conditions of the permit) |

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | OAC rule 3745-18-06(E)(2) | The emission limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3). |

**2. Additional Terms and Conditions**

**2.a** Since the raw materials introduced into this emissions unit do not contribute to PE, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no PE limitation imposed by this applicable requirement.

**2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because there is no applicable PE limitation in OAC rule 3745-17-11.

**2.c** The emission limitations in A.I.1 are based on the maximum usage; thus, hourly usage record keeping is not required.

**2.d** The individual emissions of PE, SO2, CO, VOC and NOx from each of emissions units P069 through P074 shall not exceed the following:

PE = 0.20 tpy;
SO2 = 0.07 tpy;
CO = 9.01 tpy;
VOC = 0.59 tpy; and
NOx = 5.37 tpy.

**2.e** The total annual emissions of PE, SO2, CO, VOC and NOx from emissions units P069 through P074, combined, shall not exceed the following:

PE = 0.37 tpy;
SO2 = 0.12 tpy;
CO = 16.23 tpy;
VOC = 1.06 tpy; and
NOx = 9.66 tpy.

**2.f** The natural gas usage for emissions units P069 through P074, combined, shall not exceed a total of 382,718 thousand cubic feet per year, as a rolling, 12-month summation.

## II. Operational Restrictions

**1.** The permittee shall burn only natural gas as fuel in this emissions unit.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## III. Monitoring and/or Record Keeping Requirements (continued)

**2.** The permittee shall collect and record the following information each month for emissions units P069 through P074, combined:

a. the total volume of natural gas employed, in thousands of cubic feet; and

b. the total volume of natural gas employed, as a rolling, 12-month summation, in thousands of cubic feet.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## IV. Reporting Requirements

**1.** 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.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

**2.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month limitation for natural gas usage for emissions units P069 through P074, combined.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**3.** The permittee shall submit annual reports that specify the total NOx, SO2, CO, VOC and PE emissions from emissions units P069 through P074, combined, for the previous calendar year. These reports shall be submitted by January 31 of each year.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements

**1.** Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

0.047 lb/hr of PE

Applicable Compliance Method:

Compliance may be determined by dividing the particulate emission factor of 1.9 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The particulate emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 5.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

0.20 tpy of PE

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.047 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.c** Emission Limitation:

0.37 tpy of PE from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.047 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.d** Emission Limitation:

1.22 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be determined by dividing the NOx emission factor of 50 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The NOx emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 7.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.e** Emission Limitation:

5.37 tpy of NOx

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable NOx limitation (1.22 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.f** Emission Limitation:

9.66 tpy of NOx from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable NOx limitation (1.22 lbs/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.g** Emission Limitation:

2.06 lbs/hr of CO

Applicable Compliance Method:

Compliance may be determined by dividing the CO emission factor of 84 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The CO emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-1, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 10.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.h** Emission Limitation:

9.01 tpy of CO

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable CO limitation (2.06 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.i** Emission Limitation:

16.23 tpy of CO from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable CO limitation (2.06 lbs/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.j** Emission Limitation:

0.016 lb/hr of SO2

Applicable Compliance Method:

Compliance may be determined by dividing the SO2 emission factor of 0.6 lb/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The SO2 emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 6.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.k** Emission Limitation:

0.07 tpy of SO2

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable SO2 limitation (0.016 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.l** Emission Limitation:

0.12 tpy of SO2 from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable SO2 limitation (0.016 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.m** Emission Limitation:

0.135 lb/hr of VOC

Applicable Compliance Method:

Compliance may be determined by dividing the VOC emission factor of 5.5 lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of 25 mmBtu/hr.

The VOC emission factor was obtained from AP-42, 5th Edition, Chapter 1.4, Table 1.4-2, dated July, 1998.

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Methods 1 through 4 and Method 18 or 25.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## V. Testing Requirements (continued)

**1.n** Emission Limitation:

0.59 tpy of VOC

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC limitation (0.135 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.o** Emission Limitation:

1.06 tpy of VOC from emissions units P069 through P074, combined

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC limitation (0.135 lb/hr) by the maximum annual hours of operation (8,760 hours), and by the annual capacity factor of 30 percent, and by 6 furnaces, and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**1.p** Emission Limitation:

Visible PE shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in 40 CFR Part 60, Method 9.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

**2.** Compliance with the annual natural gas usage limitation in section A.1.2.e of these terms and conditions shall be based upon the rolling, 12-month summations of the monthly gas usages recorded pursuant to section A.III.2.c.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Billet Pickle Line (P076)

**Activity Description:** Hydrofluoric and Nitric Acid pickling of billets

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| titanium billet pickling line (pickling tank, rinse tank) with wet scrubber/caustic additon | OAC rule 3745-31-05(A)(3) (PTI 17-1631, synthetic minor issued 08/25/99) | Nitrogen oxides (NOx) emissions shall not exceed 12.69 lbs/hr and 1.29 tons per rolling, 12-month period.<br><br>Hydrofluoric acid (HF) emissions shall not exceed 0.004 lb/hr and 0.018 tpy.<br><br>Nitric acid (HNO3) emissions shall not exceed 0.003 lb/hr and 0.015 tpy.<br><br>Maximum production of billets shall not exceed 6,500 tons per rolling, 12-month period.<br><br>See A.I.2.c.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-11(B). |
| | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-17-11(B)(1) | Particulate emissions (PE) shall not exceed 40.6 lbs/hr.<br><br>See A.I.2.a. |

## 2. Additional Terms and Conditions

**2.a** The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 40.6 pounds per hour. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 40.6 lbs/hour, the permittee shall comply with the more stringent limitation.

**2.b** The total production of billets from emissions unit P076 shall not exceed 6,500 tons per rolling, 12-month period. To ensure enforceability during the first 12 calendar months of operation following the issuance of the permit to install, the permittee shall not exceed the production limits specified in the following table:

| Month | Cumulative Maximum Allowable Production (tons) |
|---|---|
| 1 | 1625 |
| 2 | 2068 |
| 3 | 2511 |
| 4 | 2955 |
| 5 | 3398 |
| 6 | 3841 |
| 7 | 4284 |
| 8 | 4727 |
| 9 | 5171 |
| 10 | 5614 |
| 11 | 6057 |
| 12 | 6500 |

After the first 12 calendar months of operation following the issuance of the permit to install, compliance with the annual production limitation shall be based on upon a rolling, 12-month summation of the monthly production rates.

**2.c** The following is the Best Available Technology (BAT) determination for emissions unit P076:

i. The nitrogen oxides (NOx), hydrofluoric acid (HF), and nitric acid (HNO3) emissions from this unit shall not exceed 12.69, 0.004 and 0.003 pounds per hour, respectively. These emissions are based on maximum usage; thus, hourly record keeping is not required.

ii. The total tons of emissions per year of NOx, HF, and HNO3 from emissions unit P076 shall not exceed the following: NOx = 1.29 tons/yr; HF = 0.018 ton/yr; HNO3 = 0.015 ton/yr.

## II. Operational Restrictions

**1.** The permittee shall follow the manufacturer's recommended maintenance, at the recommended intervals, on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to the exhaust system, scrubber fans, and motors associated with those pumps and fans.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**2.** The scrubber internals and mist eliminators shall be cleaned at intervals sufficient to prevent buildup of solids or other fouling.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**3.** The pressure drop across the scrubber for emissions unit P076 shall be continuously maintained at a value of not less than 3.25 inches of water column while the emisions unit is in operation.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**4.** The scrubber water flow rate for emissions unit P076 shall be maintained at not less than 300 gallons per minute while the emissions unit is in operation.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## II. Operational Restrictions (continued)

**5.** The pH of the scrubber water for emissions unit P076 shall be maintained at not less than 7 nor greater than 11 while the emissions unit is in operation.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**6.** The scrubber system shall be operated continuously (i.e., 8760 hours per year) unless the pickling/rinse tanks are empty or covered.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall record the cumulative monthly production rates for emissions unit P076 for the first 12 calendar months of operation for purposes of determining compliance with the maximum cumulative production limits. Following the initial 12 months of operation following issuance of the PTI, the permittee shall collect and maintain monthly records of the production rates, in tons, and the rolling, 12-month summation of production rates, in tons, to determine compliance with the production limitation of 6,500 tons of billets per rolling, 12-month summation.

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

**2.** The permittee shall calculate and maintain monthly records of the NOx emissions, in tons, and the rolling, 12-month summation of the NOx emissions for emissions unit P076 as described in section A.V.3.

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

**3.** The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while emissions unit P076 is in operation. Appropriate procedures and analytical methods shall be followed to sample and analyze the scrubber water for pH. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

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

**4.** The permittee shall collect and record the following information each day:

a. the pressure drop across the scrubber (once/day), in inches of water;
b. the scrubber water flow rate (once/day), in gallons per minute;
c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;
d. the scrubber water pH (once/day); and
e. the emissions unit operating rate, in tons of billets per day.

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

**5.** The permittee shall maintain a log documenting inspections, repairs, and maintenance as described in sections A.II.1 and A.II.2.

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

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month limitation for production.

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

## IV. Reporting Requirements (continued)

**2.** The permittee shall submit annual reports that specify the rolling, 12-month summation of the NOx emissions from this emissions unit for each month of the previous calendar year. The permittee shall also submit annual reports that specify the total HF and HNO3 emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

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

**3.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at levels specified in Operation Restrictions above:

a. the static pressure drop across the scrubber;
b. the scrubber water flow rate; and
c. the scrubber water pH.

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

**4.** The permittee shall immediately report to Ohio EPA all periods of time during which the scrubber system was not operated for emissions unit P076. These reports shall include any corrective action or preventive measures taken.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in sections A.I.1. and A.I.2. of these terms and conditions shall be determined in accordance with the following methods:

**2.** Emission Limitation:

12.69 lbs/hr of NOx

Applicable Compliance Method:

Compliance shall be determined by using emission factors or by stack testing. For the emission factor method, multiply the emission factor of 1.278 lbs of NOx/ lb of titanium removed by the maximum titanium removal rate in lbs/hr. The titanium removal rate (lbs of titanium per hour) shall be determined by multiplying the surface area of the billets by the thickness removed (0.0005 inches) and then multiplying by the number of billets pickled and the density of titanium (0.163 lb/in3), as represented by the following formula:

E = (1.278 lbs of NOx/lb of Ti) * 2pi (r) (L) * (0.0005 in) * (n) * (0.163 lb/in3) * (1- 0.25)

where:

E = hourly NOx emissions (lbs of NOx/hr);
r = billet radius (inches);
L = billet length (inches);
n = number of billets per hour; and
1 - 0.25 = 1 - decimal fraction control efficiency for the wet scrubber (i.e., 0.25).

If required, compliance shall be determined by stack testing per Methods 1 through 4 and Method 7 of 40 CFR, Part 60, Appendix A.

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

## V. Testing Requirements (continued)

**3.** Emission Limitation:

1.29 tons of NOx per rolling, 12-month period

Applicable Compliance Method:

Compliance shall be determined using the records maintained pursuant to section A.III.2.

The calculation of the NOx emissions shall be performed by multiplying the emission factor from section A.V.2 by the actual production rate, as a rolling, 12-month summation, and dividing by 2000 lbs/ton.

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

**4.** Emission Limitation:

0.004 lb/hr of HF

Applicable Compliance Method:

The permittee shall assume an uncontrolled emission factor of 0.43 lb of HF/hr and a controlled emission (based on 99% control efficiency) of 0.004 lb of HF/hr. These values are obtained using a spreadsheet developed by ESCO engineering and are based on pickling tank surface dimensions (25 ft X 4.5 ft), % HF in bath, bath temperature, exhaust rate (177.8 cfm/ft2), and total air (20,000 acfm). Additionally, ambient temperature is assumed to be between 60 and 80 degrees Fahrenheit, atmospheric pressure, lateral exhaust, and a specific concentration of HF in the bath.

If required, compliance shall be determined by stack testing per Methods 1 through 4 and Method 26 or 26A of 40 CFR, Part 60, Appendix A.

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

**5.** Emission Limitation:

0.018 tpy of HF

Applicable Compliance Method:

As long as compliance is maintained with the hourly HF limitation, compliance with the annual HF limitation for emissions unit P076 will be shown (the annual HF limitation was calculated by multiplying the hourly limitation by 8760 hours/yr, and then dividing the resulting number by 2,000 lbs/ton).

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

## V. Testing Requirements (continued)

**6.** Emission Limitation:

0.003 lb/hr of HNO3

Applicable Compliance Method:

An uncontrolled emission factor of 0.17 lb of HNO3/hr and a controlled emission (based on 98% control efficiency) of 0.003 lb of HNO3/hr shall be used in determining compliance. These values are obtained using a spreadsheet developed by ESCO engineering and are based on pickling tank surface dimensions (25 ft X 4.5 ft), % HNO3 in bath, bath temperature, exhaust rate (177.8 cfm/ft2), and total air (20,000 acfm). Additionally, other conditions assumed in the spreadsheet are ambient temperature between 60 and 80 degrees Fahrenheit, atmospheric pressure, lateral exhaust, and a specific concentration of HF in the bath.

If required, compliance shall be determined by stack testing and following the appropriate U.S. EPA test method for this emissions source.

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

**7.** Emission Limitation:

0.015 tpy of HNO3

Applicable Compliance Method:

As long as compliance is maintained with the hourly HNO3 limitation, compliance with the annual HNO3 limitation for emissions unit P076 will be shown (the annual HNO3 limitation was calculated by multiplying the hourly limitation by 8760 hours/yr, and then dividing the resulting number by 2,000 lbs/ton).

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

**8.** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

**9.** Emission Limitation:

40.6 lbs/hr of PE

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

No testing is specifically required by this permit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A). Such testing may be requested at opacity levels less than those required by the visible particulate emissions limit in section A.I.1.

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

## V. Testing Requirements (continued)

**10.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months after source start-up and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable NOx emissions and PE rates.

c. The following test methods shall be employed to demonstrate compliance with the allowable NOx emissions and PE rates: Methods 1 through 4 and Method 7 of 40 CFR, Part 60, Appendix A (for NOx) and Methods 1 through 5 of 40 CFR, Part 60, Appendix A (for PE).

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office.

e. A PE test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR, Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA Southeast District Office's refusal to accept the results of the emission test.

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the test, 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 test shall be signed by the person or persons responsible for the test and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

## VI. Miscellaneous Requirements

**1.** This permit allows the use and subsequent emissions of hydrofluoric acid (HF). Estimated emissions of HF fall below levels requiring toxics modeling as specified in Ohio EPA's Air Toxics Policy. Any of the following changes may be deemed a modification to the emissions unit. Prior notification to and approval from Ohio EPA, Southeast District Office is required, including the possible issuance of modifications to PTI 17-1631 and the operating permit:

a. Any changes in the composition of the HF-containing materials, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV) than HF as indicated by the most recent version of American Conference of Governmental Industrial Hygenists, "Threshold Limit Values for Chemical Substances and Physical Agents".

b. Any change to the emissions unit or its exhaust parameters (e.g. increased emission rate, reduction of exhaust gas flow rate) that would result in increased emissions of HF. Emissions of HF greater than 1 ton per year require toxics review.

c. Any change to the emission unit or its mode of operation that would either require an increase in the emission limitations established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01.

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Blast Room (P901)

**Activity Description:** Clemco-Clementina - SCD-2460 (includes material handling)

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| blast room shot blaster with baghouse | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-17-11(B)(1) | 19.2 lbs/hr of particulate emissions (PE)<br><br>See A.I.2.b. |
| baghouse waste dust handling | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-17-08(B) | reasonably available control measures to minimize or eliminate visible emissions of fugitive dust (see section A.II.1) |

**2. Additional Terms and Conditions**

**2.a** The permittee shall not operate this emissions unit without the use of the baghouse.

**2.b** The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 19.2 pounds per hour. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 19.2 lbs/hour, the permittee shall comply with the more stringent limitation.

### II. Operational Restrictions

**1.** The permittee shall employ and maintain lids and connecting piping or other comparable equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate visible emissions of fugitive dust during the handling of the collected waste.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## II. Operational Restrictions (continued)

**2.** All PE from the blast room shall be vented to the baghouse. Fugitive emissions are allowed only from the collection point and from the handling of baghouse dust.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

d. the total duration of any visible 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 under item (d) above or continue the visible emission 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.

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

**2.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

e. any corrective actions taken to 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 under item (d) above or continue the visible emission 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.

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

## IV. Reporting Requirements

**1.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

**2.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

19.2 lbs/hr of PE

Applicable Compliance Method:

Compliance with this PE limitation shall be determined by the use of an emission factor found in the U.S. EPA publication titled "Compilation of Air Pollutant Emission Factors," AP-42, Section 13.2.6, Abrasive Blasting (9/97). Specifically, the emission factor [0.69 lb of PE/1000 lbs of abrasive (controlled)] from Table 13.2.6-1 shall be utilized to calculate PE, in lbs of PE/hr, per the following equation:

(0.69 lb of PE/1000 lbs of abrasive) x (maximum lbs of abrasive/hr)

If required, emission testing shall be performed in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

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

**1.b** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

## V. Testing Requirements (continued)

**1.c** Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and procedures in OAC rule 3745-17-03(B)(3).

[Authority Citation: OAC rule 3745-17-03(B)(3) and OAC rule 3745-77-07(C)(1)]

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

a. The emission testing shall be conducted within 6 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE rate.

c. The following test method shall be employed to demonstrate compliance with the allowable PE rate: Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office.

e. A PE test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR, Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Southeast District Office's refusal to accept the results of the emission tests.

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the tests, 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 test shall be signed by the person or persons responsible for the test and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Descale Pickle Line Shot Blaster (P902)

**Activity Description:** Wheelabrator-Frye 4 W/A Strip Cleaning - On Descale Pickle Line (includes material handling)

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| descale pickle line shot blaster with baghouse | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-17-11(B)(1) | 15.67 lbs/hr of particulate emissions (PE)<br><br>See A.I.2.b. |
| baghouse waste dust handling | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-17-08(B) | reasonably available control measures to minimize or eliminate visible emissions of fugitive dust (see section A.II.1) |

**2. Additional Terms and Conditions**

**2.a** The permittee shall not operate this emissions unit without the use of the baghouse.

**2.b** The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 15.67 pounds per hour. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 15.67 lbs/hour, the permittee shall comply with the more stringent limitation.

### II. Operational Restrictions

**1.** The permittee shall employ and maintain lids and connecting piping or other comparable equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate visible emissions of fugitive dust during the handling of the collected waste.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## II. Operational Restrictions (continued)

**2.** All PE from the blast room shall be vented to the baghouse. Fugitive emissions are allowed only from the collection point and from the handling of baghouse dust.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

d. the total duration of any visible 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 under item (d) above or continue the visible emission 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.

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

**2.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

e. any corrective actions taken to 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 under item (d) above or continue the visible emission 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.

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

## IV. Reporting Requirements

**1.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

**2.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

15.67 lbs/hr of PE

Applicable Compliance Method:

Compliance with this PE limitation shall be determined by the use of an emission factor found in the U.S. EPA publication titled "Compilation of Air Pollutant Emission Factors," AP-42, Section 13.2.6, Abrasive Blasting (9/97). Specifically, the emission factor [0.69 lb of PE/1000 lbs of abrasive (controlled)] from Table 13.2.6-1 shall be utilized to calculate PE, in lbs of PE/hr, per the following equation:

(0.69 lb of PE/1000 lbs of abrasive) x (maximum lbs of abrasive/hr)

If required, emission testing shall be performed in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

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

**1.b** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

## V. Testing Requirements (continued)

**1.c** Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and procedures in OAC rule 3745-17-03(B)(3).

[Authority Citation: OAC rule 3745-17-03(B)(3) and OAC rule 3745-77-07(C)(1)]

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

a. The emission testing shall be conducted within 6 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE rate.

c. The following test method shall be employed to demonstrate compliance with the allowable PE rate: Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office.

e. A PE test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR, Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Southeast District Office's refusal to accept the results of the emission tests.

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the tests, 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 test shall be signed by the person or persons responsible for the test and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Pangborn Sandblast Machine (P903)

**Activity Description:** Pangborn - Type ES

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Pangborn sandblast machine with baghouse | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| | OAC rule 3745-17-11(B)(1) | 14.5 lbs/hr of particulate emissions (PE)<br><br>See A.I.2.b. |
| baghouse waste dust handling | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-17-08(B) | reasonably available control measures to minimize or eliminate visible emissions of fugitive dust (see section A.II.1) |
| | OAC rule 3745-31-05(A)(3) (PTI 17-283) | 0.030 grain of PE/dry standard cubic foot (gr/dscf) of exhaust gases<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B), 3745-17-07(B), and 3745-17-08(B). |

**2. Additional Terms and Conditions**

**2.a** The permittee shall not operate this emissions unit without the use of the baghouse.

**2.b** The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 14.5 pounds per hour. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 14.5 lbs/hour, the permittee shall comply with the more stringent limitation.

## II. Operational Restrictions

**1.** The permittee shall employ and maintain lids and connecting piping or other comparable equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate visible emissions of fugitive dust during the handling of the collected waste.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**2.** The pressure drop across the baghouse shall be maintained within the range of 2 to 9 inches of water column while the emissions unit is in operation.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

**3.** PE from the sandblast machine shall be vented to the baghouse. Fugitive emissions are allowed only from the collection point and from the handling of baghouse dust.

[Authority Citation: OAC rule 3745-77-07(A)(1)]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.

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

**2.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

e. any corrective actions taken to 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 under item (d) above or continue the visible emission 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.

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

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

## IV. Reporting Requirements (continued)

**2.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

14.5 lbs/hr of PE and 0.030 gr of PE/dscf of exhaust gases

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

**1.b** Emission Limitation:

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

Applicable Compliance Method:

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

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

**1.c** Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and procedures in OAC rule 3745-17-03(B)(3).

[Authority Citation: OAC rule 3745-17-03(B)(3) and OAC rule 3745-77-07(C)(1)]

## V. Testing Requirements (continued)

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

a. The emission testing shall be conducted within 6 months after permit issuance and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE rate.

c. The following test method shall be employed to demonstrate compliance with the allowable PE rate: Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office.

e. A PE test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR, Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the 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 Southeast District Office's refusal to accept the results of the emission tests.

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the tests, 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 test shall be signed by the person or persons responsible for the test and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

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