



State of Ohio Environmental Protection Agency

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

07/09/03

**CERTIFIED MAIL**

**RE: Draft Title V Chapter 3745-77 permit**

15-76-00-0613  
The Timken Company - Steel Plants  
Daniel P. Lake  
1835 Dueber Ave, S.W.  
Canton, OH 44706-2798

Dear Daniel P. Lake:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Canton Division of Air Pollution Control within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled.

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

**If you have any questions or comments concerning this draft Title V permit, please contact Canton Division of Air Pollution Control.**

Very truly yours,

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

cc: USEPA (electronically submitted)  
File, DAPC PMU  
Canton Division of Air Pollution Control  
Pennsylvania  
West Virginia



State of Ohio Environmental Protection Agency

DRAFT TITLE V PERMIT

Issue Date: 07/09/03

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 15-76-00-0613 to:
The Timken Company - Steel Plants
1835 Dueber Avenue, S.W.
Canton, OH 44706

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

Table with 3 columns: Emissions Unit ID (Company ID), Emissions Unit Activity Description, and Emissions Unit Activity Description. Rows include B101 (Boiler #1), B102 (Boiler #2), F102 (Roadways and Parking Areas), K101 (Elkem Inspection Unit), P102 (#1 EAF), P103 (Refiner), P104 (Soaking Pits 1-4), P105 (Soaking Pits 5-8), P106 (Hot Scarfing Machine), P107 (Billet Grinders), P109 (Shot Blaster), P111 (Stool Plate Rebuild), P112 (Truck Dump Station), P115 (Ladle Dryer), P116 (Melt Shop Additive Bins), P117 (Ladle Preheater #1), P118 (Locomotive Sanding Tower), P119 (Ladle Preheater #2), P120 (Ladle Preheater #3), P121 (Ladle Preheater #4), P123 (Soaking Pit #12), P124 (Soaking Pit #11), Z101 (Slag Processing), and Z102 (Hot Metal Transfer).

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:

Canton Division of Air Pollution Control  
420 Market Avenue N.  
Canton, OH 44702-1544  
(330) 489-3385

OHIO ENVIRONMENTAL PROTECTION AGENCY

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Christopher Jones  
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, 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. 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))*

- ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

- (a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. 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. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii)

pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i), (ii) and (iii))*

- (b) 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 deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement 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. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(iii))*

iii. **For monitoring, record keeping, and reporting requirements:**

Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. 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. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no deviations occurred during that period.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))*

- 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))

**2. 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 unit(s) 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 OAC rule 3745-15-06, 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).  
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iii))

**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:

1. 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
2. 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.

*(Authority for term: OAC rule 3745-77-07(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 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 emission 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.

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)

*(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**

Each insignificant activity 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))*

**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 quarterly, i.e., 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 Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

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

## **Part II - Specific Facility Terms and Conditions**

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

1. This Title V permit now incorporates emissions units which were originally part of two separately permitted facilities. The operations at the Gambrinus Bearing Plant and Gambrinus Roller Plant (originally identified as Ohio EPA premise number 1576000613) have been combined with the operations at the Canton Bearing Plant to form this Title V facility pursuant to OAC rule 3745-77-01(Q). The emissions unit identification numbers for the operations at the Gambrinus Bearing and Roller Plants have been changed to avoid duplicating those emissions unit identification numbers already in use at the Canton Bearing Plant. The original emissions unit identification numbers are specified in parentheses, where appropriate.

This Title V permit now incorporates emissions units which were originally part of two separately permitted facilities. The operations at the Gambrinus Bearing Plant and Gambrinus Roller Plant (originally identified as Ohio EPA premise number 1576000613) have been combined with the operations at the Canton Bearing Plant to form this Title V facility pursuant to OAC rule 3745-77-01(Q). The emissions unit identification numbers for the operations at the Gambrinus Bearing and Roller Plants have been changed to avoid duplicating those emissions unit identification numbers already in use at the Canton Bearing Plant. The original emissions unit identification numbers are specified in parentheses, where appropriate.

2. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 30 days after receiving notification from the Ohio EPA.

This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.

### **B. State Only Enforceable Section**

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

G101 - (G001) gasoline dispensing facility;  
T107 - (T007) diesel fuel tank and dispensing (T107);  
Z103 - parts washer;  
Z104 - saws;  
Z105 - ingot shakeout area;  
Z106 - ladle refining area; and  
Z107 - wire feed.

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.

**B. State Only Enforceable Section (continued)**

The following insignificant emissions units are located at this facility:

- G101 - (G001) gasoline dispensing facility;
- T107 - (T007) diesel fuel tank and dispensing (T107);
- Z103 - parts washer;
- Z104 - saws;
- Z105 - ingot shakeout area;
- Z106 - ladle refining area; and
- Z107 - wire feed.

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.

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Boiler #1 (B101)

**Activity Description:** Generates steam for space heating and process equipment

#### A. State and Federally Enforceable Section

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

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Clever Brooks natural gas-fired package boiler having a maximum rated heat input capacity of 56.8 mmBtu/hr. Formerly identified as (B001).	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	Particulate emissions shall not exceed 4.98 tons/yr.
		Sulfur dioxide emissions shall not exceed 0.55 lb/mmBtu of actual heat input and 136.83 tons/yr.
		Nitrogen oxide emissions shall not exceed 0.25 lb/mmBtu of actual heat input and 62.20 tons/yr.
		Carbon monoxide emissions shall not exceed 0.04 lb/mmBtu of actual heat input and 9.95 tons/yr.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-10(B).
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(B)	Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(A).
	See section A.I.2.a.	
OAC rule 3745-21-08(B)	See section A.I.2.b.	
OAC rule 3745-23-06(B)	See section A.I.2.c.	
40 CFR Part 52.1881(b)(27)(i)	See section A.I.2.d.	

## **2. Additional Terms and Conditions**

- 2.a** This emissions unit is exempt from the requirements of OAC rule 3745-18-06 during any calendar day in which natural gas having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet is the only fuel burned.
- 2.b** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 15-0144.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 15-0144.
- 2.d** The emission limitation required by this applicable rule is less stringent than the emission limitation required by OAC rule 3745-31-05(A)(3).

## **II. Operational Restrictions**

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

## **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.

## **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.
- 2. The permittee shall also submit annual reports that specify the total particulate, sulfur dioxide, nitrogen oxides, and carbon monoxide emissions from this emissions unit for the previous calendar year. The reports shall be submitted by January 31 of each year.
- 3. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## **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:

Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance may be determined by multiplying an emission factor of 1.9 lbs of particulates/mmscf by the emissions unit's maximum hourly natural gas firing capacity (.054 mmscf/hr), and then dividing by the emissions unit's rated heat input capacity (56.8 mmBtu/hr). This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

### 1.b Emission Limitation:

Sulfur dioxide emissions shall not exceed 0.55 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance may be determined by dividing an emission factor of 0.6 lb of sulfur dioxide/mmscf by the heating value of the natural gas (1050 Btu/scf). This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

### 1.c Emission Limitation:

Nitrogen oxide emissions shall not exceed 0.25 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance may be determined by dividing an emission factor of 50 lbs of nitrogen oxides/mmscf by the heating value of the natural gas (1050 Btu/scf). This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-1 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

### 1.d Emission Limitation:

Carbon monoxide emissions shall not exceed 0.04 lb/mmBtu of actual heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

## V. Testing Requirements (continued)

### 1.e 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:

If required, the permittee shall demonstrate compliance with this emission limitation through visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

### 1.g Emission Limitations:

Particulate emissions shall not exceed 4.98 tons/yr.  
Sulfur dioxide emissions shall not exceed 136.83 tons/yr.  
Nitrogen oxides emissions shall not exceed 62.20 tons/yr.  
Carbon monoxide emissions shall not exceed 9.95 tons/yr.

Applicable Compliance Method:

The annual emission limitations were established by multiplying the lb/mmBtu emission limitations by the emissions unit's maximum heat input capacity of 56.8mmBtu/hr, and by 8760 hrs/yr, and then dividing by 2000 lbs/ton. Compliance with the annual emission limitations will be assumed as long as compliance with the short-term emission limitations is maintained.

## 2. If required, 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 to demonstrate compliance with the allowable mass emission rate(s) for particulates, sulfur dioxide, nitrogen oxides, and carbon monoxide, and visible particulate emissions, as appropriate.
- b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for particulates - Method 5 of 40 CFR Part 60, Appendix A;  
for sulfur dioxide - Method 6 of 40 CFR Part 60, Appendix A;  
for nitrogen oxides - Method 7 of 40 CFR Part 60, Appendix A;  
for visible particulate emissions - Method 9 of 40 CFR Part 60, Appendix A; and  
for carbon monoxide - Method 10 of 40 CFR Part 60, Appendix A.

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

- c. The following parameters, at a minimum, shall be monitored and recorded for this emissions unit during the emission testing:
  - i. the steam flow rate; and
  - ii. the natural gas firing rate.
- 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 Canton City Health Department, Air Pollution Control Division.

Facility Name: **The Timken Company - Steel Plant**

Facility ID: **15-76-00-0613**

Emissions Unit: **Boiler #1 (B101)**

## **V. Testing Requirements (continued)**

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, APCD. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in refusal to accept the test results by the Canton City Health Department.

Personnel from the Canton City Health Department, APCD 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit's operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (B101). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, APCD within 30 days following completion of the test.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Boiler #2 (B102)

**Activity Description:** Generates steam for space heating and process equipment

#### A. State and Federally Enforceable Section

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

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Clever Brooks natural gas-fired package boiler having a maximum rated heat input capacity of 56.8 mmBtu/hr. Formerly identified as (B002).	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	Particulate emissions shall not exceed 4.98 tons/yr.
		Sulfur dioxide emissions shall not exceed 0.55 lb/mmBtu of actual heat input and 136.83 tons/yr.
		Nitrogen oxide emissions shall not exceed 0.25 lb/mmBtu of actual heat input and 62.20 tons/yr.
		Carbon monoxide emissions shall not exceed 0.04 lb/mmBtu of actual heat input and 9.95 tons/yr.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-10(B).
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(B)	Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(A).
		See section A.I.2.a.
	OAC rule 3745-21-08(B)	See section A.I.2.b.
OAC rule 3745-23-06(B)	See section A.I.2.c.	
40 CFR Part 52.1881(b)(27)(i)	See section A.I.2.d.	

## **2. Additional Terms and Conditions**

- 2.a** This emissions unit is exempt from the requirements of OAC rule 3745-18-06 during any calendar day in which natural gas having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet is the only fuel burned.
- 2.b** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 15-0144.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 15-0144.
- 2.d** The emission limitation required by this applicable rule is less stringent than the emission limitation required by OAC rule 3745-31-05(A)(3).

## **II. Operational Restrictions**

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

## **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.

## **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.
- 2. The permittee shall also submit annual reports that specify the total particulate, sulfur dioxide, nitrogen oxides, and carbon monoxide emissions from this emissions unit for the previous calendar year. The reports shall be submitted by January 31 of each year.
- 3. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## **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:

Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance may be determined by multiplying an emission factor of 1.9 lbs of particulates/mmscf by the emissions unit's maximum hourly natural gas firing capacity (.054 mmscf/hr), and then dividing by the emissions unit's rated heat input capacity (56.8 mmBtu/hr). This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

**1.b** Emission Limitation:

Sulfur dioxide emissions shall not exceed 0.55 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance may be determined by dividing an emission factor of 0.6 lb of sulfur dioxide/mmscf by the heating value of the natural gas (1050 Btu/scf). This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

**1.c** Emission Limitation:

Nitrogen oxide emissions shall not exceed 0.25 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance may be determined by dividing an emission factor of 50 lbs of nitrogen oxides/mmscf by the heating value of the natural gas (1050 Btu/scf). This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-1 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

**1.d** Emission Limitation:

Carbon monoxide emissions shall not exceed 0.04 lb/mmBtu of actual heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

## V. Testing Requirements (continued)

### 1.e 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:

If required, the permittee shall demonstrate compliance with this emission limitation through visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

### 1.g Emission Limitations:

Particulate emissions shall not exceed 4.98 tons/yr.  
Sulfur dioxide emissions shall not exceed 136.83 tons/yr.  
Nitrogen oxides emissions shall not exceed 62.20 tons/yr.  
Carbon monoxide emissions shall not exceed 9.95 tons/yr.

Applicable Compliance Method:

The annual emission limitations were established by multiplying the lb/mmBtu emission limitations by the emissions unit's maximum heat input capacity of 56.8mmBtu/hr, and by 8760 hrs/yr, and then dividing by 2000 lbs/ton. Compliance with the annual emission limitations will be assumed as long as compliance with the short-term emission limitations is maintained.

## 2. If required, 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 to demonstrate compliance with the allowable mass emission rate(s) for particulates, sulfur dioxide, nitrogen oxides, and carbon monoxide, and visible particulate emissions, as appropriate.
- b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for particulates - Method 5 of 40 CFR Part 60, Appendix A;  
for sulfur dioxide - Method 6 of 40 CFR Part 60, Appendix A;  
for nitrogen oxides - Method 7 of 40 CFR Part 60, Appendix A;  
for visible particulate emissions - Method 9 of 40 CFR Part 60, Appendix A; and  
for carbon monoxide - Method 10 of 40 CFR Part 60, Appendix A.

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

- c. The following parameters, at a minimum, shall be monitored and recorded for this emissions unit during the emission testing:
  - i. the steam flow rate; and
  - ii. the natural gas firing rate.
- 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 Canton City Health Department, Air Pollution Control Division.

## **V. Testing Requirements (continued)**

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, APCD. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in refusal to accept the test results by the Canton City Health Department.

Personnel from the Canton City Health Department, APCD 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit's operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (B101). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, APCD within 30 days following completion of the test.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Roadways and Parking Areas (F102)

**Activity Description:** Roadways and parking areas

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paved roadways and paved and unpaved parking areas used by vehicles with 4 to 18 wheels (see section A.I.2.a)	OAC rule 3745-17-07(B)(4)	no visible particulate emissions except for 6 minutes during any 60-minute observation period
	OAC rule 3745-17-08(B)(8)	See section A.I.2.k. reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see sections A.I.2.c, A.I.2.d, A.I.2.f, and A.I.2.j.)
unpaved roadways and parking areas (see section A.I.2.b)	OAC rule 3745-17-07(B)(5)	no visible particulate emissions except for 13 minutes during any 60-minute observation period
	OAC rule 3745-17-08(B), (B)(2)	See section A.I.2.k. reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see sections A.I.2.e through A.I.2.j)
	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-07(B) and 3745-17-08(B).

## 2. Additional Terms and Conditions

- 2.a** The paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

Paved Roadways:

all paved (asphalt or chip and seal) roadway segments

Paved Parking Areas:

all paved (asphalt or chip and seal) parking areas

The visible emission limitation and applicable control measures apply to each separate road segment and/or parking area.

- 2.b** The unpaved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

Unpaved Roadways:

none

Unpaved Parking Areas:

all unpaved (gravel) parking areas

The visible emission limitation and applicable control measures apply to each separate road segment and/or parking area.

- 2.c** The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by flushing with water to minimize or eliminate visible emissions of fugitive dust at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.d** The permittee shall employ reasonably available control measures on the unpaved shoulders of all paved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved shoulders of all paved roadways with water and/or any other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The permittee shall employ reasonably available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with water and/or any other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.f** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

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

- 2.g** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- 2.h** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.i** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.j** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.
- 2.k** The requirement to comply with this visible particulate emission limitation shall terminate on the date the USEPA approves the visible particulate emission limitation (10% opacity as a 3-minute average) specified in OAC rule 3745-17-07(B)(8) as a revision to the Ohio SIP for particulate matter (see B.I.1 below).

**II. Operational Restrictions**

**None**

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

- 1.** The permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:

paved roadways	minimum inspection frequency
all asphalt or chip and seal road segments	weekly
paved parking areas	minimum inspection frequency
all asphalt or chip and seal parking areas	weekly
unpaved parking areas	minimum inspection frequency
all gravel parking areas	weekly
- 2.** The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

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

3. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented; and
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.
4. The information required in A.III.3.d shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

### **IV. Reporting Requirements**

1. The permittee shall submit deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. each instance when a control measure that was to be implemented as a result of an inspection was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements specified in General Term and Condition A.1.c.ii.
3. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

### **V. Testing Requirements**

1. Compliance with the emissions limitation for the paved and unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

### **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paved and unpaved roadways and parking areas used by vehicles with 4 to 18 wheels	OAC rule 3745-17-07(B)(8)(a)	There shall be no visible fugitive particulate emissions from any paved or unpaved roadway or parking area greater than 10% opacity.  See Section B.I.2.a.

**2. Additional Terms and Conditions**

- 2.a This visible particulate emission limitation will be enforceable upon incorporation into the State Implementation Plan (SIP).

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

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

**1.a Emission Limitation:**

There shall be no visible fugitive particulate emissions from any paved or unpaved roadway or parking area greater than 10% opacity.

Applicable Compliance Method:

Compliance with this visible particulate emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9, and the modifications listed in OAC rule 3745-17-03(B)(3)(d). The visible emission limitation applies to each separate road segment and/or parking area identified in section A.I.2, and the emission test shall be performed for the representative road or parking area for each segment.

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Elkem Inspection Unit (K101)  
**Activity Description:** Identifies and marks defects in steel

#### A. State and Federally Enforceable Section

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

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Elkem Inspection Unit - Identifies and marks defects in steel with spray paint. Unit is equipped with overspray filters. Paint is applied at ambient temperature with no drying oven. Formerly identified as K001.	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	There shall be no visible particulate emissions from this emissions unit.  No more than 10 gallons of cleanup materials shall be used in this emissions unit each day.  Volatile organic compound (VOC) emissions shall not exceed 10.95 tons/yr.  See A.II.1 below.
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B) and 3745-21-09(U)(2)(e)(iii).
	OAC rule 3745-17-11(B)	The visible particulate emission limitation specified in this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-09(U)(2)(e)(iii)	Particulate emissions shall not exceed 0.551 lb/hr.  No more than 10 gallons of coatings shall be use in this emissions unit each day.

##### 2. Additional Terms and Conditions

None

## **II. Operational Restrictions**

1. The permittee shall not employ any photochemically active materials during the operation of this emissions unit or during purging or cleanup operations.
2. The permittee shall operate the dry filtration system (overspray filters) whenever this emissions unit is in operation.

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

1. The permittee shall collect and record the following information each day for this emissions unit:
  - a. the name and identification number of each coating employed;
  - b. the volume, in gallons, of each coating employed;
  - c. the total volume, in gallons, of all of the coatings employed;
  - d. the name and identification of each cleanup material employed;
  - e. the number of gallons of each cleanup material employed; and
  - f. the total volume, in gallons, of all of the cleanup materials employed.
2. The permittee shall collect and record the following information each month for the purpose of determining annual VOC emissions:
  - a. the VOC content of each cleanup material, in pounds per gallon;
  - b. the VOC content of each coating, as applied, in pounds per gallon; and
  - c. the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons.
3. The permittee shall also maintain daily records that document any time periods when the dry filtration system (overspray filters) was not in service when the emissions unit was in operation.

## **IV. Reporting Requirements**

1. The permittee shall notify the Director (the Canton City Health Department, Air Pollution Control Division) in writing of any daily record showing that the emissions unit employed more than the applicable maximum daily coating and/or cleanup material usage limitation. The notification shall include a copy of such record and shall be sent to the Director (the Canton City Health Department, Air Pollution Control Division) within 45 days after the exceedance occurs.
2. The permittee shall notify the Director (the Canton City Health Department, Air Pollution Control Division) in writing of any daily record showing that the dry filtration system (overspray filters) was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Canton City Health Department, Air Pollution Control Division) within 30 days after the event occurs.
3. The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

## **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:

Particulate emissions shall not exceed 0.551 lb/hr.

Applicable Compliance Method:

To determine the actual worst case particulate emission rate, the following equation shall be used:

$$E = (M) * (1-TE) * (1-CE)$$

where:

E = particulate emission rate (lbs/hr)

M = maximum coating solids usage rate (lbs/hr)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment - If more than one piece of control equipment is used in series, the equation should be multiplied by additional (1-CE) terms for each additional piece of equipment.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

### 1.b Emission Limitations:

No more than 10 gallons of coatings shall be use in this emissions unit each day.

No more than 10 gallons of cleanup materials shall be used in this emissions unit each day.

Applicable Compliance Method:

Compliance with these usage limitations shall be based upon the records required pursuant to section A.III.1.

### 1.c Emission Limitation:

VOC emissions shall not exceed 10.95 tons/yr.

Applicable Compliance Method:

Compliance with this emission limitation shall be based upon the records required pursuant to section A.III.2.

### 1.d Emission Limitation:

There shall be no visible particulate emissions from this emissions unit.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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 EAF (P102)  
**Activity Description:** Produces steel product

#### A. State and Federally Enforceable Section

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

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P102 - 200 tons/hour electric arc furnace (#1 EAF) with direct evacuation control (DEC) and a building evacuation system for capture and a baghouse for control  (formerly P002)	OAC rule 3745-31-05(A)(3) and 3745-31-02 through 3745-31-10 (PTI 15-01339)	Particulate emissions shall not exceed 0.0032 grain per dry standard cubic foot of exhaust gases (gr/dscf), 0.125 lb/ton of steel, 25 lbs/hr, and 109.5 tons/yr.  PM10 emissions shall not exceed 0.1 lb/ton of steel, 19 lbs/hr, and 83.22 tons/yr.  Sulfur dioxide emissions shall not exceed 0.15 lb/ton of steel, 30 lbs/hr, and 90 tons/yr.  Nitrogen oxide emissions shall not exceed 0.2 lb/ton of steel, 43.8 lbs/hr, and 131.4 tons/yr.  Carbon monoxide emissions shall not exceed 4.8 lbs/ton of steel, 960 lbs/hr, and 2,882 tons/yr.  Volatile organic compound emissions shall not exceed 0.1 lb/ton of steel, 20 lbs/hr, and 60 tons/yr.  Lead emissions shall not exceed 0.26 lb/hr and 0.79 ton/yr.  Fluoride emissions shall not exceed 1.4 lbs/hr and 4.2 tons/yr.  Mercury emissions shall not exceed 0.0037 lb/hr and 0.012 ton/yr.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(A)(3) and 3745-31-02 through 3745-31-10 (PTI 15-01339)	The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart AAa.  See sections A.1.2.a through A.1.2.f below.
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-05(A)(3) and 3745-31-02 through 3745-31-10.
	OAC rule 3745-17-07(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-05(A)(3) and 3745-31-02 through 3745-31-10.
	OAC rule 3745-17-08(B)(3)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-05(A)(3) and 3745-31-02 through 3745-31-10.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-05(A)(3) and 3745-31-02 through 3745-31-10.
	OAC rule 3745-18-06(E)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-05(A)(3) and 3745-31-02 through 3745-31-10.
	40 CFR Part 60, Subpart AAa	See section A.1.2.g below.

**2. Additional Terms and Conditions**

- 2.a** The emissions from P102 shall be vented to the melt shop baghouse. In addition, the capture system shall be designed and operated such that all emissions are captured and ducted to the dropout chamber and then to the baghouse. The capture system for the emissions unit shall include a common canopy hood and a roof control system, both of which vent to the dropout chamber and then to the melt shop baghouse.
- 2.b** The maximum annual production rate for this emissions unit shall not exceed 1,200,000 tons of steel, based upon a rolling, 12-month summation of the tons of steel produced per month.
- 2.c** Sulfur shall not be added at the electric arc furnace.

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

- 2.d** Prior to the modification of this emissions unit, the permittee shall submit a Scrap Management Plan (SMP) to the Canton City Health Department, Air Pollution Control Division for review and approval. The SMP shall be implemented immediately after approval by the Canton City Health Department, Air Pollution Control Division. The main focus of the SMP will be to ensure that the purchase of excessively oily scrap and other combustible material will be minimized to the greatest extent possible. All grades of scrap shall be free of excessive dirt, oil, and grease. Heavily oiled scrap shall not be used. As part of the SMP, the permittee shall install a radionuclide detector which will be used to inspect all incoming scrap material entering the facility. Radioactive scrap material shall not be used at this facility. Any scrap material which is determined to be radioactive shall be disposed of in accordance with the Nuclear Regulatory Commission's (NRC) requirements.
- 2.e** The permittee shall develop a parametric monitoring and record keeping plan in order to confirm that the Melt Shop Baghouse servicing this emissions unit is operating properly. This plan shall be developed prior to the transformer upgrade of this emissions unit and shall be consistent with the Title V and CAM requirements. The monitoring equipment (if necessary) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).
- 2.f** No more than 200 tons of steel per hour shall be tapped from this emissions unit. This production rate is an average hourly rate determined by dividing the tons of steel produced per day by the number of operating hours per day.
- 2.g** The following standards are requirements of the 40 CFR Part 60, Subpart AAa. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable (BACT and BAT).

Visible particulate emissions shall not exceed the following limits as a 6-minute average:

- a. 3% opacity from the baghouse exit; and
- b. 6% opacity from the meltshop for visible particulate emissions due solely to the operation of an EAF(s) or AOD vessel(s).

## **II. Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within the range of 3 to 8 inches of water while the emissions unit is in operation.

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

1. In accordance with 40 CFR Part 60, Subpart AAa, observations of the opacity of the visible particulate emissions from the control devices shall be performed by a certified visible emission observer as follows:
  - a. Visible particulate emission observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. These observations shall be taken in accordance with Method 9 and, for at least three 6-minute periods, the opacity shall be recorded for any point(s) where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of the 3 percent opacity limit.

The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity readings and to verify that the Method 9 certifications are up to date for the responsible individuals.

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

2. In accordance with 40 CFR Part 60, Subpart AAa, observations of the opacity of the visible emissions from the shop shall be performed by a certified visible emission observer as follows:
  - a. Visible particulate emission observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. The owner or operator shall maintain records of all shop observations made in accordance with the above requirements. [The permittee has opted to take advantage of this option found in Section 60.273a(d). This Section was added as part of a rule revision found in the Federal Register March 2, 1999 (Volume 64, Number 40). This Section states the following: "A furnace static pressure monitoring device is not required on any EAF equipped with a DEC system that does the required observations of shop opacity. The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity readings and to verify that the Method 9 certifications are up to date for the responsible individuals.
3. The permittee shall monitor the operation of the furnace control systems and maintain records in accordance with the following requirements:
  - a. The permittee shall either (1) check and record the control system fan motor amperes and damper positions on a once-per-shift basis; or (2) install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood. The monitoring device may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow rate monitoring devices shall have an accuracy of + 10 percent over their normal operating range and shall be calibrated according to the manufacturer's instructions. The Ohio EPA, DAPC may require the permittee to demonstrate the accuracy of the monitoring devices relative to Methods 1 and 2 of Appendix A of 40 CFR, Part 60. The values of these parameters as determined during the most recent demonstration of compliance shall be maintained at the appropriate levels for each applicable period. Operation at other than baseline values will be considered by the Ohio EPA, DAPC to be unacceptable operation and maintenance of the control system. The permittee may petition the Ohio EPA for reestablishment of these parameters whenever the permittee can demonstrate to the Agency's satisfaction that the operating conditions upon which the parameters were previously established are no longer applicable.
  - b. The permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture systems (i.e., pressure sensors, dampers, and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion.) Any deficiencies shall be recorded and proper maintenance performed. The permittee may petition the Ohio EPA, DAPC to approve any alternative to monthly operational status inspections that will provide a continuous record of the operation of each emission capture system.
  - c. Upon approval by the USEPA, an alternative method may be established to replace the monitoring and record keeping requirements found in sections A.III.3.a and A.III.3.b above.
4. The permittee shall perform the appropriate parametric monitoring and record keeping as identified in the plan established in section A.I.2.e. for the Melt Shop Baghouse.

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

5. The permittee shall maintain monthly records of the following information:
  - a. the tons of steel produced for each month; and
  - b. beginning after the first 12 calendar months after the transformer upgrade, the rolling, 12-month summation of the tons of steel produced per month.

Also, during the first 12 calendar months of operation after the transformer upgrade, the permittee shall record the cumulative steel production for each calendar month.
6. The permittee shall maintain daily production records for this emissions unit. These records, at a minimum, shall contain the following information:
  - a. the number of hours the emissions unit was operated;
  - b. the tons of steel produced; and
  - c. the hourly production rates, i.e., (b)/(a).
7. 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.
8. 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 daily basis while the emissions unit is operating.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation and, for the first 12 calendar months of operation after the transformer upgrade, all exceedances of the maximum allowable cumulative steel production levels.
2. The permittee shall submit a written report of all exceedances of the opacity restrictions contained in section A.I.2.g above to the Canton local air agency semiannually. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity exceeds these limits.
3. The permittee shall submit quarterly written deviation (excursion) reports that identify all periods of time during which the parameters established in the parametric monitoring plan for the Melt Shop Baghouse did not comply with the allowable range specified in the plan.
4. The permittee shall submit quarterly deviation (excursion) reports that identify any day during which the average hourly production rate of this emissions unit exceeded 200 tons/hour.
5. 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 in section A.II.1, as well as the corrective actions that were taken to achieve compliance.
6. The permittee shall submit the required deviation (excursion) reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
7. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## 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 Limitations:

Volatile organic compound emissions shall not exceed 0.1 lb/ton of steel and 20 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.3.

**1.b** Emission Limitation:

Volatile organic compound emissions shall not exceed 60 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum hourly production rate of 130 tons/hr by the allowable limit of 0.1 lb/ton, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.c** Emission Limitations:

Nitrogen oxide emissions shall not exceed 0.2 lb/ton of steel and 43.8 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.3.

**1.d** Emission Limitation:

Nitrogen oxide emissions shall not exceed 131.4 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum hourly production rate of 130 tons/hr by the allowable limit of 0.2 lb/ton, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.e** Emission Limitation:

Lead emissions shall not exceed 0.26 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.3.

**1.f** Emission Limitation:

Lead emissions shall not exceed 0.79 ton/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation of 0.26 lb/hr by the actual annual hours of operation, in hours/year, and then dividing by 2000 lbs/ton.

**V. Testing Requirements (continued)**

**1.g** Emission Limitations:

Particulate emissions shall not exceed 0.0032 grain per dry standard cubic foot of exhaust gases (gr/dscf), 0.125 lb/ton of steel, and 25 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.3.

**1.h** Emission Limitation:

Particulate emissions shall not exceed 109.5 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum hourly production rate of 130 tons/hr by the allowable limit of 0.125 lb/ton, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.i** Emission Limitations:

Carbon monoxide emissions shall not exceed 4.8 lbs/ton of steel and 960 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.3.

**1.j** Emission Limitation:

Carbon monoxide emissions shall not exceed 2882 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum hourly production rate of 130 tons/hr by the allowable limit of 4.8 lbs/ton, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.k** Emission Limitation:

Fluoride emissions shall not exceed 1.4 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.3.

**1.l** Emission Limitation:

Fluoride emissions shall not exceed 4.2 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation of 1.4 lbs/hr by the actual annual hours of operation, in hours/year, and then dividing by 2000 lbs/ton.

**V. Testing Requirements (continued)**

**1.m** Emission Limitations:

Sulfur dioxide emissions shall not exceed 0.15 lb/ton of steel and 30 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.3.

**1.n** Emission Limitation:

Sulfur dioxide emissions shall not exceed 90 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum hourly production rate of 130 tons/hr by the allowable limit of 0.15 lb/ton, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.o** Emission Limitations:

PM10 emissions shall not exceed 0.1 lb/ton of steel and 19 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.3.

**1.p** Emission Limitations:

PM10 emissions shall not exceed 83.22 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum hourly production rate of 130 tons/hr by the allowable limit of 0.1 lb/ton, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.q** Emission Limitation:

Mercury emissions shall not exceed 0.0037 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.3.

**1.r** Emission Limitation:

Mercury (Hg) emissions shall not exceed 0.012 ton/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation of 0.0037 lb/hr by the actual annual hours of operation, in hours/year, and then dividing by 2000 lbs/ton.

## **V. Testing Requirements (continued)**

### **1.s** Emission Limitations:

Visible particulate emissions shall not exceed the following limits as a 6-minute average:

- a. 3% opacity from the baghouse exit; and
- b. 6% opacity from the meltshop for visible particulate emissions due solely to the operation of an EAF(s) or AOD vessel(s).

Applicable Compliance Method:

Compliance shall be demonstrated through visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

### **2.** Compliance with the usage restrictions and operational limitations in section A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

#### **2.a** Usage Restriction:

The maximum annual production rate for this emissions unit shall not exceed 1,200,000 tons of steel, based upon a rolling, 12-month summation of the tons of steel produced per month.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.5.

#### **2.b** Usage Restriction:

No more than 200 tons of steel per hour shall be tapped from this emissions unit. This production rate is an average hourly rate determined by dividing the tons of steel produced per day by the number of operating hours per day.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.6.

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

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

#### **3.b** The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division.

#### **3.c** During each run of each test, the permittee shall monitor and record the melt shop baghouse operating parameter conditions established pursuant to the plan required in section A.I.2.e.

**V. Testing Requirements (continued)**

- 3.d** The permittee shall determine compliance with the particulate emission standards as follows:
- i. Method 5D shall be used for positive-pressure fabric filters to determine the particulate matter concentration and volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 4 hours and 4.50 dscm (160 DSCF) and, when a single EAF is sampled, the sampling time shall include an integral number of heats.
  - ii. Method 9 and the procedures of 40 CFR Part 60.11 shall be used to determine opacity.
  - iii. The test runs shall be conducted concurrently, unless inclement weather interferes.
- 3.e** The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
- i. for PM<sub>10</sub>, Method 201 of 40 CFR Part 51, Appendix M  
for PM<sub>10</sub>, Method 202 of 40 CFR Part 51, Appendix M (condensable);
  - ii. for sulfur dioxide, Method 6 of 40 CFR Part 60, Appendix A;
  - iii. for nitrogen oxides, Method 7 of 40 CFR Part 60, Appendix A;
  - iv. for carbon monoxide, Method 10 of 40 CFR Part 60, Appendix A;
  - v. for volatile organic compounds, Method 25 of 40 CFR Part 60, Appendix A;
  - vi. for lead, Method 12 of 40 CFR Part 60, Appendix A;
  - vii. for fluoride, Method 13 of 40 CFR Part 60, Appendix A; and
  - viii. for mercury, Method 101A of 40 CFR Part 61, Appendix B.
- 3.f** During the particulate matter runs, the permittee shall obtain the following additional information:
- i. The pressure in the free space inside the furnace shall be determined during the melting and refining period(s) using the monitoring devices required under Additional Special Term and Additional Special Term and Condition B.2.a of this permit.
  - ii. The control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the EAFs.
- 3.g** During performance tests, the permittee shall not add gaseous diluents to the effluent gas stream after the fabric in any pressurized fabric filter collector unless the amount of dilution is separately determined and considered in the determination of emissions.

## **V. Testing Requirements (continued)**

- 3.h** Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit's operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Canton City Health Department, Air Pollution Control Division.

## **VI. Miscellaneous Requirements**

1. Pursuant to Engineering Guide #69, modeling to demonstrate compliance with the Ohio EPA's Air Toxic Policy was not necessary since the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Refiner (P103)  
**Activity Description:** Refines steel

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Refiner (P103); formerly P003	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	Particulate emissions shall not exceed 0.0052 grain per dry standard cubic foot (gr/dscf) of exhaust gases.
	40 CFR Part 60, Subpart AAa	Visible particulate emissions shall not exceed 3.0% opacity as a 6-minute average from the baghouse stack.
	OAC rule 3745-17-11(B)	See section A.I.2.a.
	OAC rule 3745-17-07(A)(1)	See section A.I.2.a.

##### 2. Additional Terms and Conditions

- 2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-05(A)(3).

##### II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 3 to 6 inches of water while the emissions unit is in operation.

##### 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 daily basis while the emissions unit is operating.

##### 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 in section A.II.1, as well as the corrective actions that were taken to achieve compliance.
2. The permittee shall submit the required deviation (excursion) reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

#### **IV. Reporting Requirements (continued)**

3. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

#### **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:

Particulate emissions shall not exceed 0.0052 gr/dscf of exhaust gases.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test methods and procedrues specified in section A.V.2.

- 1.b Emission Limitation:

Visible particulate emissions shall not exceed 3.0% opacity as a 6-minute average from the baghouse stack.

Applicable Compliance Method:

If required, compliance shall be demonstrated by performing visual particulate emission observations in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

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

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division.

## **V. Testing Requirements (continued)**

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P103). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Soaking Pits 1-4 (P104)

**Activity Description:** Heats steel

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Soaking pits 1-4, natural gas or (emergency) No. 2 oil fired, 21.6 mmBtu each. Formerly (P004). Equipped with burner controls.	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	Particulate emissions shall not exceed 0.02 lb/mmBtu and 7.58 tons/yr.
		Sulfur dioxide emissions shall not exceed 0.55 lb/mmBtu and 208.14 tons/yr.
		Nitrogen oxide emissions shall not exceed 0.50 lb/mmBtu and 189.22 tons/yr.
		Carbon monoxide emissions shall not exceed 0.04 lb/mmBtu and 15.15 tons/yr.
		See A.1.2.a below.
	OAC rule 3745-17-07(A)(1)	See A.1.2.b below.
	OAC rule 3745-17-11	See A.1.2.c below.
	OAC rule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 80 lbs/ton of actual process weight rate.
	40 CFR Part 52.1881(b)(27)(viii)	

##### 2. Additional Terms and Conditions

- 2.a** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.b** No process weight rate can be determined and the particulate matter uncontrolled mass rate of emissions (UMRE) is less than 10 pounds per hour; therefore, there is no applicable particulate matter emission limit from OAC rule 3745-17-11.
- 2.c** No process weight rate can be determined; therefore, there is no applicable sulfur dioxide limit established by OAC rule 3745-18-06(E)(1).

## **II. Operational Restrictions**

1. The permittee shall burn only natural gas or emergency No. 2 fuel oil in this emissions unit.
2. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitations specified in Section A.I above.

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

1. For each day during which the permittee burns a fuel other than natural gas or No. 2 fuel oil, the permittee shall maintain a record of the type and quantity of the fuel burned in this emissions unit.
2. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) Also, if necessary, the permittee shall maintain monthly records of the calculated sulfur dioxide emission rate based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all shipments of oil during a calendar month. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.
3. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

## **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or No. 2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall notify the Canton City Health Department, Air Pollution Control Division in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Canton City Health Department, Air Pollution Control Division within 45 days after the deviation occurs.
3. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## **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:**

Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:

When firing natural gas, compliance may be determined by multiplying the particulate emission factor of 1.9 lbs/mmscf by the maximum hourly natural gas firing capacity of the emissions unit, in mmscf/hr, and then dividing by the maximum rated heat input capacity (21.6 mmBtu/hr). The particulate emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

When firing No. 2 fuel oil, compliance may be determined by multiplying the particulate emission factor of 2.0 lbs/1000 gallons of No. 2 fuel oil fired by the maximum hourly No. 2 fuel oil firing capacity of the emissions unit (1000 gallons/hr), and then dividing by the maximum rated heat input capacity (21.6 mmBtu/hr). The particulate emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3, Table 1.3-1 (9/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9), while firing No. 2 fuel oil.

### **1.b Emission Limitation:**

Sulfur dioxide emissions shall not exceed 0.55 lb/mmBtu of actual heat input.

Applicable Compliance Method:

When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

When firing No. 2 fuel oil, except as provided below, compliance with the allowable sulfur dioxide emission limitation may be demonstrated by documenting that the sulfur content of each shipment of No. 2 fuel oil received during a calendar month meets the limitation.

If the sulfur content of each shipment of No. 2 fuel oil received during a calendar month does not comply with the allowable emission limitation on an "as-received" basis, compliance with the allowable sulfur dioxide emission limitation may be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments of No. 2 fuel oil during the calendar month.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, while firing No. 2 fuel oil.

### **1.c Emission Limitation:**

Nitrogen oxide emissions shall not exceed 0.50 lb/mmBtu of actual heat input.

Applicable Compliance Method:

When firing natural gas or No. 2 fuel oil, compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.2.

**V. Testing Requirements (continued)**

**1.d** Emission Limitation:

Carbon monoxide emissions shall not exceed 0.04 lb/mmBtu of actual heat input.

Applicable Compliance Method:

When firing natural gas or No. 2 fuel oil, compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.2.

**1.e** Emission Limitation:

Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

Applicable Compliance Method:

Compliance with this limitation will be assumed to be successfully demonstrated due to the high allowable emission limitation and the very low amount of sulfur dioxide emitted from the combustion of natural gas.

**1.f** Emission Limitation:

Particulate emissions shall not exceed 7.58 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.020 lb/mmBtu by the maximum rated heat input capacity of 21.6 mmBtu/hr, and by 4 (the number of soaking pits), and by the maximum operating schedule of 8,760 hours/year, and then dividing by 2000 lbs/ton.

**1.g** Emission Limitation:

Sulfur dioxide emissions shall not exceed 208.14 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.55 lb/mmBtu by the maximum rated heat input capacity of 21.6 mmBtu/hr, and by 4 (the number of soaking pits), and by the maximum operating schedule of 8,760 hours/year, and then dividing by 2000 lbs/ton.

**1.h** Emission Limitation:

Nitrogen oxide emissions shall not exceed 189.22 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.50 lb/mmBtu by the maximum rated heat input capacity of 21.6 mmBtu/hr, and by 4 (the number of soaking pits), and by the maximum operating schedule of 8,760 hours/year, and then dividing by 2000 lbs/ton.

## V. Testing Requirements (continued)

### 1.i Emission Limitation:

Carbon monoxide emissions shall not exceed 15.15 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.04 lb/mmBtu by the maximum rated heat input capacity of 21.6 mmBtu/hr, and by 4 (the number of soaking pits), and by the maximum operating schedule of 8,760 hours/year, and then dividing by 2000 lbs/ton.

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

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

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for nitrogen oxides and carbon monoxide.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for nitrogen oxides, Method 7 of 40 CFR Part 60, Appendix A, and for carbon monoxide, Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division.

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P104). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Soaking Pits 5-8 (P105)  
**Activity Description:** Heats steel

#### A. State and Federally Enforceable Section

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

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Soaking pits 5-8, natural gas or (emergency) No. 2 oil fired, 21.6 mmBtu each. Formerly (P005). Equipped with burner controls.	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	Particulate emissions shall not exceed 0.02 lb/mmBtu and 7.58 tons/yr.
		Sulfur dioxide emissions shall not exceed 0.55 lb/mmBtu and 208.14 tons/yr.
		Nitrogen oxide emissions shall not exceed 0.50 lb/mmBtu and 189.22 tons/yr.
		Carbon monoxide emissions shall not exceed 0.04 lb/mmBtu and 15.15 tons/yr.
		See A.1.2.a below.
	OAC rule 3745-17-07(A)(1)	See A.1.2.b below.
	OAC rule 3745-17-11	See A.1.2.c below.
	OAC rule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 80 lbs/ton of actual process weight rate.
	40 CFR Part 52.1881(b)(27)(viii)	

##### 2. Additional Terms and Conditions

- This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- No process weight rate can be determined and the particulate matter uncontrolled mass rate of emissions (UMRE) is less than 10 pounds per hour; therefore, there is no applicable particulate matter emission limit from OAC rule 3745-17-11.
- No process weight rate can be determined; therefore, there is no applicable sulfur dioxide limit established by OAC rule 3745-18-06(E)(1).

## **II. Operational Restrictions**

1. The permittee shall burn only natural gas or emergency No. 2 fuel oil in this emissions unit.
2. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitations specified in Section A.I above.

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

1. For each day during which the permittee burns a fuel other than natural gas or No. 2 fuel oil, the permittee shall maintain a record of the type and quantity of the fuel burned in this emissions unit.
2. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) Also, if necessary, the permittee shall maintain monthly records of the calculated sulfur dioxide emission rate based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all shipments of oil during a calendar month. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.
3. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

## **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or No. 2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall notify the Canton City Health Department, Air Pollution Control Division in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Canton City Health Department, Air Pollution Control Division within 45 days after the deviation occurs.
3. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## **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:

Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:

When firing natural gas, compliance may be determined by multiplying the particulate emission factor of 1.9 lbs/mmscf by the maximum hourly natural gas firing capacity of the emissions unit, in mmscf/hr, and then dividing by the maximum rated heat input capacity (21.6 mmBtu/hr). The particulate emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

When firing No. 2 fuel oil, compliance may be determined by multiplying the particulate emission factor of 2.0 lbs/1000 gallons of No. 2 fuel oil fired by the maximum hourly No. 2 fuel oil firing capacity of the emissions unit (1000 gallons/hr), and then dividing by the maximum rated heat input capacity (21.6 mmBtu/hr). The particulate emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3, Table 1.3-1 (9/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9), while firing No. 2 fuel oil.

### 1.b Emission Limitation:

Sulfur dioxide emissions shall not exceed 0.55 lb/mmBtu of actual heat input.

Applicable Compliance Method:

When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

When firing No. 2 fuel oil, except as provided below, compliance with the allowable sulfur dioxide emission limitation may be demonstrated by documenting that the sulfur content of each shipment of No. 2 fuel oil received during a calendar month meets the limitation.

If the sulfur content of each shipment of No. 2 fuel oil received during a calendar month does not comply with the allowable emission limitation on an "as-received" basis, compliance with the allowable sulfur dioxide emission limitation may be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments of No. 2 fuel oil during the calendar month.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, while firing No. 2 fuel oil.

### 1.c Emission Limitation:

Nitrogen oxide emissions shall not exceed 0.50 lb/mmBtu of actual heat input.

Applicable Compliance Method:

When firing natural gas or No. 2 fuel oil, compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.2.

**V. Testing Requirements (continued)**

**1.d** Emission Limitation:

Carbon monoxide emissions shall not exceed 0.04 lb/mmBtu of actual heat input.

Applicable Compliance Method:

When firing natural gas or No. 2 fuel oil, compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.2.

**1.e** Emission Limitation:

Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

Applicable Compliance Method:

Compliance with this limitation will be assumed to be successfully demonstrated due to the high allowable emission limitation and the very low amount of sulfur dioxide emitted from the combustion of natural gas.

**1.f** Emission Limitation:

Particulate emissions shall not exceed 7.58 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.020 lb/mmBtu by the maximum rated heat input capacity of 21.6 mmBtu/hr, and by 4 (the number of soaking pits), and by the maximum operating schedule of 8,760 hours/year, and then dividing by 2000 lbs/ton.

**1.g** Emission Limitation:

Sulfur dioxide emissions shall not exceed 208.14 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.55 lb/mmBtu by the maximum rated heat input capacity of 21.6 mmBtu/hr, and by 4 (the number of soaking pits), and by the maximum operating schedule of 8,760 hours/year, and then dividing by 2000 lbs/ton.

**1.h** Emission Limitation:

Nitrogen oxide emissions shall not exceed 189.22 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.50 lb/mmBtu by the maximum rated heat input capacity of 21.6 mmBtu/hr, and by 4 (the number of soaking pits), and by the maximum operating schedule of 8,760 hours/year, and then dividing by 2000 lbs/ton.

## V. Testing Requirements (continued)

### 1.i Emission Limitation:

Carbon monoxide emissions shall not exceed 15.15 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.04 lb/mmBtu by the maximum rated heat input capacity of 21.6 mmBtu/hr, and by 4 (the number of soaking pits), and by the maximum operating schedule of 8,760 hours/year, and then dividing by 2000 lbs/ton.

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

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

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for nitrogen oxides and carbon monoxide.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for nitrogen oxides, Method 7 of 40 CFR Part 60, Appendix A, and for carbon monoxide, Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division.

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P104). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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 Scarfing Machine (P106)

**Activity Description:** Cuts steel product

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
4-Side hot scarfer, formerly (P006). Equipped with a wet electrostatic precipitator (ESP) for particulate control.	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	Particulate emissions shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases.
		Particulate emissions shall not exceed 23.87 tons/yr.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-07(B).
	OAC rule 3745-17-07(A)	See section A.I.2.a.
	OAC rule 3745-17-07(B)(1)	See section A.I.2.b.
	OAC rule 3745-17-08(B)	See section A.I.2.c.
	OAC rule 3745-17-11	See section A.I.2.d.

##### 2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
- 2.c The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall include the following: localized hooding over the emissions unit.

The collection efficiency shall be sufficient to minimized or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

- 2.d The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

## II. Operational Restrictions

1. The average total combined power input (in kilowatts) to the field(s) of the ESP, for any 3-hour block of time during the emissions unit's operation, shall be no less than 90% of the total combined power input, as a 3-hour average, during the most recent emissions test that demonstrated the emissions unit was in compliance with the particulate emission limitation.
2. The permittee shall operate the ESP during any operation of this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the following ESP operating parameters:
  - a. transformer primary and secondary voltage readings for each transformer rectifier set (TR set);
  - b. transformer primary and secondary current readings for each TR set; and
  - c. discharge electrode spark rate;

The above readings shall be logged once a shift while the emissions unit is operating.

2. The power input (in kilowatts) for each TR set for each hour, calculated by multiplying the secondary voltage (in KV) by the secondary current (in amps) for each TR set, shall also be recorded.
3. The permittee shall maintain a monthly record of the number of hours the emissions unit was in operation.
4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 daily 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.

## IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average total combined power input to all fields of the ESP does not comply with the operational restriction specified in section A.II.1 of this permit.
2. The permittee shall submit quarterly reports which identify the sections of the ESP that were out of service along with the time period(s) involved.

#### **IV. Reporting Requirements (continued)**

- 3.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving 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 Canton City Health Department, Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month period.
- 4.** The permittee shall submit the required deviation (excursion) reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
- 5.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

#### **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:

Particulate emissions shall not exceed 0.01 gr/dscf of actual heat input.

Applicable Compliance Method:

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

- 1.b** Emission Limitation:

Particulate emissions shall not exceed 23.87 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable particulate emission limitation of 0.01 gr/dscf by the maximum flow rate, in dscf/hr, and by the conversion factor of 1 lb/7000 grains, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

- 1.c** Emission Limitation:

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

Applicable Compliance Method:

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

- 1.d** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible particulate emission observations of fugitive dust performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

## **V. Testing Requirements (continued)**

2. If required, 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 to demonstrate compliance with the allowable mass emission rate for particulates.
  - b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - c. The following parameters, at a minimum, shall be monitored and recorded during the emission testing: the weight of steel scarfed and electrical readings from the electrostatic precipitator controls.
  - 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 Canton City Health Department, Air Pollution Control Division.

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit's operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit's operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P106). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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 Grinders (P107)  
**Activity Description:** Repairs defects in steel

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Billet Grinders 1 & 2, formerly (P007). Particulate emissions controlled with a baghouse, (P107BH-1).	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	Particulate emissions shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases.
		Particulate emissions shall not exceed 18.92 tons/yr.
	OAC rule 3745-17-07(A)	See section A.I.2.a.
	OAC rule 3745-17-07(B)(1)	See section A.I.2.b.
	OAC rule 3745-17-08(B)	See section A.I.2.c.
	OAC rule 3745-17-11	See section A.I.2.d.

##### 2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
- 2.c The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall include the following: localized hooding over the emissions unit.

The collection efficiency shall be sufficient to minimized or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

- 2.d The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained between 2 and 9 inches of water while the emissions unit is in operation.

### **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 daily basis while the emissions unit is operating.
2. The permittee shall maintain a monthly record of the number of hours the emissions unit was in operation.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 daily 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.

### **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 in section A.II.1, as well as the corrective actions that were taken to achieve compliance.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving 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 Canton City Health Department, Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit the required deviation (excursion) reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
4. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

### **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:

**V. Testing Requirements (continued)**

**1.a** Emission Limitation:

Particulate emissions shall not exceed 0.01 gr/dscf of actual heat input.

Applicable Compliance Method:

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

**1.b** Emission Limitation:

Particulate emissions shall not exceed 18.92 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable particulate emission limitation of 0.01 gr/dscf by the maximum flow rate, in dscf/hr, and by the conversion factor of 1 lb/7000 grains, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.c** Emission Limitation:

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

Applicable Compliance Method:

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

**1.d** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible particulate emission observations of fugitive dust performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

**2.** If required, 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 to demonstrate compliance with the allowable mass emission rate for particulates.

b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

c. The following parameter, at a minimum, shall be monitored and recorded during the emission test: the pressure drop across the baghouse.

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 Canton City Health Department, Air Pollution Control Division.

## **V. Testing Requirements (continued)**

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit's operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit's operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P107). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Shot Blaster (P109)  
**Activity Description:** Removes scale from steel

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Shot Blaster, formerly (P009), particulate emissions controlled with a baghouse, (P109BH-1).	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	Particulate emissions shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases.
		Particulate emissions shall not exceed 2.65 tons/yr.
	OAC rule 3745-17-07(A)	See section A.I.2.a.
	OAC rule 3745-17-07(B)(1)	See section A.I.2.b.
	OAC rule 3745-17-08(B)	See section A.I.2.c.
	OAC rule 3745-17-11	See section A.I.2.d.

##### 2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
- 2.c The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall include the following: localized hooding over the emissions unit.

The collection efficiency shall be sufficient to minimized or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

- 2.d The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained between 2 and 9 inches of water while the emissions unit is in operation.

### 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 daily basis while the emissions unit is operating.
2. The permittee shall maintain a monthly record of the number of hours the emissions unit was in operation.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 daily 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.

### 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 in section A.II.1, as well as the corrective actions that were taken to achieve compliance.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving 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 Canton City Health Department, Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit the required deviation (excursion) reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
4. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

### 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:

**V. Testing Requirements (continued)**

**1.a** Emission Limitation:

Particulate emissions shall not exceed 0.01 gr/dscf of actual heat input.

Applicable Compliance Method:

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

**1.b** Emission Limitation:

Particulate emissions shall not exceed 2.65 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable particulate emission limitation of 0.01 gr/dscf by the maximum flow rate, in dscf/hr, and by the conversion factor of 1 lb/7000 grains, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**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:

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

**1.d** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible particulate emission observations of fugitive dust performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

**2.** If required, 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 to demonstrate compliance with the allowable mass emission rate for particulates.
- b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- c. The following parameter, at a minimum, shall be monitored and recorded during the emission test: the pressure drop across the baghouse.
- 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 Canton City Health Department, Air Pollution Control Division.

## **V. Testing Requirements (continued)**

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit's operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit's operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P109). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Stool Plate Rebuild (P111)

**Activity Description:** Rebuilds stool plates

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Stool Plate Rebuild, formerly (P011). Particulate emissions are controlled by baghouse P111BH-1.	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	Particulate emissions shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases.
		Particulate emissions shall not exceed 13.05 tons/yr.
	OAC rule 3745-17-07(A)	See section A.I.2.a.
	OAC rule 3745-17-07(B)(1)	See section A.I.2.b.
	OAC rule 3745-17-08(B)	See section A.I.2.c.
	OAC rule 3745-17-11	See section A.I.2.d.

##### 2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
- 2.c The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall include the following: localized hooding over the emissions unit.

The collection efficiency shall be sufficient to minimized or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

- 2.d The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained between 3.5 and 6.5 inches of water while the emissions unit is in operation.

### **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 daily basis while the emissions unit is operating.
2. The permittee shall maintain a monthly record of the number of hours the emissions unit was in operation.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 daily 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.

### **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 in section A.II.1, as well as the corrective actions that were taken to achieve compliance.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving 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 Canton City Health Department, Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit the required deviation (excursion) reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
4. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

### **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:

**V. Testing Requirements (continued)**

**1.a** Emission Limitation:

Particulate emissions shall not exceed 0.01 gr/dscf of actual heat input.

Applicable Compliance Method:

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

**1.b** Emission Limitation:

Particulate emissions shall not exceed 13.05 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable particulate emission limitation of 0.01 gr/dscf by the maximum flow rate, in dscf/hr, and by the conversion factor of 1 lb/7000 grains, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.c** Emission Limitation:

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

Applicable Compliance Method:

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

**1.d** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible particulate emission observations of fugitive dust performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

**2.** If required, 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 to demonstrate compliance with the allowable mass emission rate for particulates.
- b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- c. The following parameter, at a minimum, shall be monitored and recorded during the emission test: the pressure drop across the baghouse.
- 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 Canton City Health Department, Air Pollution Control Division.

Facility Name: **The Timken Company - Steel Plant**

Facility ID: **15-76-00-0613**

Emissions Unit: **Stool Plate Rebuild (P111)**

## **V. Testing Requirements (continued)**

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit's operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit's operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P111). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Truck Dump Station (P112)  
**Activity Description:** Stores products used in steel making process

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Truck Dump Station; formerly (P012). Particulate emissions are controlled by baghouse P112BH-1.	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	Particulate emissions shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases.
		Particulate emissions shall not exceed 13.24 tons/yr.
	OAC rule 3745-17-07(A)	See section A.I.2.a.
	OAC rule 3745-17-07(B)(1)	See section A.I.2.b.
	OAC rule 3745-17-08(B)	See section A.I.2.c.
	OAC rule 3745-17-11	See section A.I.2.d.

##### 2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
- 2.c The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall include the following: localized hooding over the emissions unit.

The collection efficiency shall be sufficient to minimized or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

- 2.d The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained between 3.5 and 6.5 inches of water while the emissions unit is in operation.

### **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 daily basis while the emissions unit is operating.
2. The permittee shall maintain a monthly record of the number of hours the emissions unit was in operation.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 daily 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.

### **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 in section A.II.1, as well as the corrective actions that were taken to achieve compliance.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving 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 Canton City Health Department, Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit the required deviation (excursion) reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
4. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

### **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:

**V. Testing Requirements (continued)**

**1.a** Emission Limitation:

Particulate emissions shall not exceed 0.01 gr/dscf of actual heat input.

Applicable Compliance Method:

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

**1.b** Emission Limitation:

Particulate emissions shall not exceed 13.24 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable particulate emission limitation of 0.01 gr/dscf by the maximum flow rate, in dscf/hr, and by the conversion factor of 1 lb/7000 grains, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.c** Emission Limitation:

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

Applicable Compliance Method:

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

**1.d** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible particulate emission observations of fugitive dust performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

**2.** If required, 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 to demonstrate compliance with the allowable mass emission rate for particulates.
- b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- c. The following parameter, at a minimum, shall be monitored and recorded during the emission test: the pressure drop across the baghouse.
- 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 Canton City Health Department, Air Pollution Control Division.

## **V. Testing Requirements (continued)**

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit's operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit's operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P112). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Ladle Dryer (P115)  
**Activity Description:** Dries ladles

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ladle Dryer, 16.8 mmBtu, natural gas fired, formerly (P015).	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	Particulate emissions shall not exceed 0.020 lb/mmBtu.
		Nitrogen oxide emissions shall not exceed 0.50 lb/mmBtu and 36.7 tons/yr.
		Carbon monoxide emissions shall not exceed 0.04 lb/mmBtu and 2.94 tons/yr.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(B) and 3745-17-08(B).
	OAC rule 3745-17-07(B)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.
	OAC rule 3745-17-11	See section A.I.2.c.
	OAC rule 3745-17-08(B)	See section A.I.2.d.
	OAC rule 3745-18-06(E)(1)	See section A.I.2.e.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weigh input.

##### 2. Additional Terms and Conditions

- 2.a Visible particulate emission of fugitive dust shall not exceed 20% as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

## 2. Additional Terms and Conditions (continued)

- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c No process weight rate can be determined and the particulate matter uncontrolled mass rate of emissions (UMRE) is less than 10 pounds per hour; therefore, there is no applicable particulate emission limit from OAC rule 3745-17-11.
- 2.d The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall consist of the use of only natural gas as fuel for this emissions unit.

If the permittee can demonstrate compliance with the fuel burning restriction outlined above, the employment of the permittee's RACM, in accordance with the requirements of OAC rule 3745-17-08(B), will be deemed adequate.

- 2.e No process weight rate can be determined; therefore, there is no applicable sulfur dioxide limit specified by OAC rule 3745-18-06(E)(1).

## II. Operational Restrictions

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

## 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.
- 2. The permittee shall maintain a monthly record of the number of hours the emissions unit was in operation.
- 3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 daily 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.

## 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.

#### 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 the egress points (i.e., building windows, doors, roof monitors, etc.) serving 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 Canton City Health Department, Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit the required deviation (excursion) reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
4. All reports shall be submitted to the Canton Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

#### 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:

Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance may be determined by multiplying the particulate emission factor of 1.9 lbs/mmscf by the maximum hourly natural gas firing capacity of the emissions unit, in mmscf/hr, and then dividing by the maximum rated heat input capacity (21.6 mmBtu/hr). The particulate emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

**1.b** Emission Limitation:

Nitrogen oxide emissions shall not exceed 0.50 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be demonstrated by dividing the nitrogen oxides emission factor of 50 lbs/mmscf of natural gas by the heating value of natural gas per cu. ft. The nitrogen oxides emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-1 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 7.

**1.c** Emission Limitation:

Nitrogen oxide emissions shall not exceed 36.79 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.50 lb/mmBtu by the maximum rated heat input capacity of 16.8 mmBtu/hr, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**V. Testing Requirements (continued)**

**1.d** Emission Limitation:

Carbon monoxide emissions shall not exceed 0.04 lb/mmBtu of actual heat input.

Applicable Compliance Method:

If required, compliance shall be demonstrated by performing a stack test in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10.

**1.e** Emission Limitation:

Carbon monoxide emissions shall not exceed 2.94 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.04 lb/mmBtu by the maximum rated heat input capacity of 16.8 mmBtu/hr, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.f** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible particulate emission observations of fugitive dust performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

**1.g** Emission Limitation:

Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

Applicable Compliance Method:

Compliance with this limitation will be assumed to be successfully demonstrated due to the high allowable emission limitation and the very low amount of sulfur dioxide emitted from the combustion of natural gas.

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

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates, nitrogen oxides, and carbon monoxide.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A, for nitrogen oxides, Methods 1 through 4 and Method 7 of 40 CFR Part 60, Appendix A, and for carbon monoxide, Methods 1 through 4 and Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division.

Facility Name: **The Timken Company - Steel Plant**

Facility ID: **15-76-00-0613**

Emissions Unit: **Ladle Dryer (P115)**

## **V. Testing Requirements (continued)**

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P115). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Melt Shop Additive Bins (P116)  
**Activity Description:** Stores alloys used in steel making process

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F & LA Additive Bins; formerly (P016) with baghouse control (116BH-1)	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	Particulate emissions shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases.
		Particulate emissions shall not exceed 23.52 tons/yr.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-07(B).
	OAC rule 3745-17-07(A)	See section A.1.2.a.
	OAC rule 3745-17-07(B)(1)	See section A.1.2.b.
	OAC rule 3745-17-08(B)	See section A.1.2.c.
	OAC rule 3745-17-11	See section A.1.2.d.

##### 2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
- 2.c The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM). These measures shall include, but are not limited to, the following:
  - i. the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control the fugitive dust; and
  - ii. the collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.
- 2.d The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

## **II. Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within the range recommended by the manufacturer, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established. The pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division within 6 months of permit issuance.

The permittee may petition the Canton City Health Department, Air Pollution Control Division for a reassessment of the pressure drop range provided the permittee can demonstrate to the Canton City Health Department, Air Pollution Control Division's satisfaction that the operating conditions upon which the pressure drop range previously established are no longer applicable.

## **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 daily basis while the emissions unit is operating.
2. The permittee shall maintain a monthly record of the number of hours the emissions unit was in operation.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 daily 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.

## **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 in section A.II.1, as well as the corrective actions that were taken to achieve compliance.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving 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 Canton City Health Department, Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit the required deviation (excursion) reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
4. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## 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:

Particulate emissions shall not exceed 0.01 gr/dscf of actual heat input.

Applicable Compliance Method:

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

**1.b** Emission Limitation:

Particulate emissions shall not exceed 23.52 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable particulate emission limitation of 0.01 gr/dscf by the maximum flow rate, in dscf/hr, and by the conversion factor of 1 lb/7000 grains, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.c** Emission Limitation:

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

Applicable Compliance Method:

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

**1.d** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible particulate emission observations of fugitive dust performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

## V. Testing Requirements (continued)

2. If required, 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 to demonstrate compliance with the allowable mass emission rate for particulates.
  - b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - c. The following parameters, at a minimum, shall be monitored and recorded during the emission testing: the pressure drop across the baghouse, the identity of the metallurgical additives, and quantity of material being transported.
  - 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 Canton City Health Department, Air Pollution Control Division.

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit's operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit's operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P116). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Ladle Preheater #1 (P117)  
**Activity Description:** Preheats ladles

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ladle Preheater #1, formerly (P017). Natural gas fired with low NOx burner control; 21.0 mmBtu/hr input.	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.  Nitrogen oxide emissions shall not exceed 0.50 lb/mmBtu of actual heat input and 45.99 tons/yr.  Carbon monoxide emissions shall not exceed 0.04 lb/mmBtu of actual heat input and 3.68 tons/yr.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(B) and 3745-17-08(B).
	OAC rule 3745-17-07(A)	See section A.I.2.a.
	OAC rule 3745-17-07(B)(1)	See section A.I.2.b.
	OAC rule 3745-17-08(B)	See section A.I.2.c.
	OAC rule 3745-17-11	See section A.I.2.d.
	OAC rule 3745-18-06(E)(1)	See section A.I.2.e.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weigh input.

##### 2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.b Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

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

- 2.c** The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall consist of the use of only natural gas as fuel for this emissions unit.

If the permittee can demonstrate compliance with the fuel burning restriction outlined above, the employment of the permittee's RACM, in accordance with the requirements of OAC rule 3745-17-08(B), will be deemed adequate.

- 2.d** No process weight rate can be determined and the particulate matter uncontrolled mass rate of emissions (UMRE) is less than 10 pounds per hour; therefore, there is no applicable particulate matter emission limit from OAC rule 3745-17-11.
- 2.e** No process weight rate can be determined; therefore, there is no applicable sulfur dioxide limit established by OAC rule 3745-18-06(E)(1).

## **II. Operational Restrictions**

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

## **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.
2. The permittee shall maintain a monthly record of the number of hours the emissions unit was in operation.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 daily 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.

## **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.

#### **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 the egress points (i.e., building windows, doors, roof monitors, etc.) serving 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 Canton City Health Department, Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit the required deviation (excursion) reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
4. All reports shall be submitted to the Canton Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

#### **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:

Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance may be determined by multiplying the particulate emission factor of 1.9 lbs/mmscf by the maximum hourly natural gas firing capacity of the emissions unit, in mmscf/hr, and then dividing by the maximum rated heat input capacity (21.0 mmBtu/hr). The particulate emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

**1.b** Emission Limitation:

Nitrogen oxide emissions shall not exceed 0.50 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be demonstrated by dividing the nitrogen oxides emission factor of 50 lbs/mmscf of natural gas by the heating value of natural gas per cu. ft. The nitrogen oxides emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-1 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 7.

**1.c** Emission Limitation:

Nitrogen oxide emissions shall not exceed 45.99 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.50 lb/mmBtu by the maximum rated heat input capacity of 21.0 mmBtu/hr, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

## **V. Testing Requirements (continued)**

### **1.d Emission Limitation:**

Carbon monoxide emissions shall not exceed 0.04 lb/mmBtu of actual heat input.

Applicable Compliance Method:

If required, compliance shall be demonstrated by performing a stack test in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10.

### **1.e Emission Limitation:**

Carbon monoxide emissions shall not exceed 3.68 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.04 lb/mmBtu by the maximum rated heat input capacity of 21.0 mmBtu/hr, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

### **1.f Emission Limitation:**

Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

Applicable Compliance Method:

Compliance with this limitation will be assumed to be successfully demonstrated due to the high allowable emission limitation and the very low amount of sulfur dioxide emitted from the combustion of natural gas.

### **1.g Emission Limitation:**

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

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible particulate emission observations of fugitive dust performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

## **V. Testing Requirements (continued)**

2. Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P117). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

If required, the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates, nitrogen oxides, and carbon monoxide.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A, for nitrogen oxides, Methods 1 through 4 and Method 7 of 40 CFR Part 60, Appendix A, and for carbon monoxide, Methods 1 through 4 and Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Locomotive Sanding Tower (P118)  
**Activity Description:** Stores sand used on railroad tracks

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Locomotive Sanding equipment with storage silo and pneumatic sand handling system; formerly (P018). Captures silo particulate emissions with a fabric filter.	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 8.56 lbs/hr.
	OAC rule 3745-17-07(A)(1)	See section A.I.2.a.
	OAC rule 3745-17-07(B)	See section A.I.2.b.
	OAC rule 3745-17-08(B)	See section A.I.2.c.

##### 2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
- 2.b Visible fugitive particulate emissions from this emissions unit shall not exceed 20% opacity as a 3-minute average.
- 2.c Pursuant to OAC rule 3745-17-08(A)(2), the requirements specified in OAC rule 3745-17-08(B) apply to this emissions unit.
- 2.d This emissions unit is a "new source," as defined in OAC rule 3745-31-01, that has not obtained a permit to install in accordance with OAC rule 3745-31-02. (See A.VI.1.) The emission limitations specified in sections A.I.1 and A.I.2 will serve only as interim emission limitations until a permit to install is issued that defines "best available technology," pursuant to OAC rule 3745-31-05.

##### II. Operational Restrictions

None

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

1. Records of maintenance shall be kept on file which include the dates of the filtering media replacements. Also, records of any equipment failures and corresponding repairs made to the emissions unit or the air pollution controls shall be kept that document the relevant dates and nature of the events.

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

2. The permittee shall perform visible particulate emission observations at the discharge of the fabric filter whenever the sand silo is refilled. The visible particulate emission observations shall be performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

### **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when the opacity limits for this emissions unit are exceeded. Each report shall be submitted within 30 days after the deviation occurs, to the Canton City Health Department, Air Pollution Control Division.
2. The permittee shall submit the required deviation (excursion) reports in accordance with the requirements specified in Part I - General Term and Condition A.I.c.
3. All reports shall be submitted to the Canton Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

### **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:

Particulate emissions shall not exceed 8.56 lbs/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and procedures specified in 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:

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

**1.c** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

## **V. Testing Requirements (continued)**

2. If required, 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 to demonstrate compliance with the allowable mass emission rate for particulates and the opacity limitations.
  - b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A, and for opacity, Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - c. The tests shall be conducted while the emissions unit is being filled with sand at or near its maximum capacity unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division. The opacity demonstrations shall also be performed while the sand silo is being filled and while sand is being applied to the rail tracks.

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P118). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

## **VI. Miscellaneous Requirements**

1. The permittee installed this emissions unit in 1985 without first applying for and obtaining a permit to install (PTI), in violation of OAC rule 3745-31-02. As the initial step to allow this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete PTI application within 30 days after issuance of this permit.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Ladle Preheater #2 (P119)  
**Activity Description:** Preheats ladles

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ladle Preheater #2; formerly (P019). Natural gas fired with low NOx burner control; 10.0 mmBtu/hr input.	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	Particulate emissions shall not exceed 0.020 lb/mmBtu and 0.876 ton/yr.  Nitrogen oxide emissions shall not exceed 0.10 lb/mmBtu and 4.38 tons/yr.  Carbon monoxide emissions shall not exceed 0.02 lb/mmBtu and 0.876 ton/yr.
	OAC rule 3745-17-07(B)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(B) and 3745-17-08(B).
	OAC rule 3745-17-07(A)	See section A.I.2.a.
	OAC rule 3745-17-11	See section A.I.2.b.
	OAC rule 3745-17-08(B)	See section A.I.2.c.
	OAC rule 3745-18-06(E)(1)	See section A.I.2.d.
	40 CFR Part 52.1881(b)(27)(viii)	See section A.I.2.e.
		Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weigh input.

##### 2. Additional Terms and Conditions

- 2.a Visible particulate emission of fugitive dust shall not exceed 20% as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

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

- 2.b** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c** No process weight rate can be determined and the particulate matter uncontrolled mass rate of emissions (UMRE) is less than 10 pounds per hour; therefore, there is no applicable particulate emission limit from OAC rule 3745-17-11.
- 2.d** The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall consist of the use of only natural gas as fuel for this emissions unit.

If the permittee can demonstrate compliance with the fuel burning restriction outlined above, the employment of the permittee's RACM, in accordance with the requirements of OAC rule 3745-17-08(B), will be deemed adequate.

- 2.e** No process weight rate can be determined; therefore, there is no applicable sulfur dioxide limit specified by OAC rule 3745-18-06(E)(1).

## **II. Operational Restrictions**

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

## **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.
- 2. The permittee shall maintain a monthly record of the number of hours the emissions unit was in operation.
- 3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 daily 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.

## **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.

#### **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 the egress points (i.e., building windows, doors, roof monitors, etc.) serving 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 Canton City Health Department, Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit the required deviation (excursion) reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
4. All reports shall be submitted to the Canton Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

#### **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:

Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance may be determined by multiplying the particulate emission factor of 1.9 lbs/mmscf by the maximum hourly natural gas firing capacity of the emissions unit, in mmscf/hr, and then dividing by the maximum rated heat input capacity (10.0 mmBtu/hr). The particulate emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

**1.b** Emission Limitation:

Nitrogen oxide emissions shall not exceed 0.10 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be demonstrated by dividing the nitrogen oxides emission factor of 50 lbs/mmscf of natural gas by the heating value of natural gas per cu. ft. The nitrogen oxides emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-1 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 7.

**1.c** Emission Limitation:

Nitrogen oxide emissions shall not exceed 4.38 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.10 lb/mmBtu by the maximum rated heat input capacity of 10.0 mmBtu/hr, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**V. Testing Requirements (continued)**

**1.d** Emission Limitation:

Carbon monoxide emissions shall not exceed 0.02 lb/mmBtu of actual heat input.

Applicable Compliance Method:

If required, compliance shall be demonstrated by performing a stack test in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10.

**1.e** Emission Limitation:

Carbon monoxide emissions shall not exceed 0.876 ton/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.02 lb/mmBtu by the maximum rated heat input capacity of 10.0 mmBtu/hr, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.f** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible particulate emission observations of fugitive dust performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

**1.g** Emission Limitation:

Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

Applicable Compliance Method:

Compliance with this limitation will be assumed to be successfully demonstrated due to the high allowable emission limitation and the very low amount of sulfur dioxide emitted from the combustion of natural gas.

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

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates, nitrogen oxides, and carbon monoxide.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A, for nitrogen oxides, Methods 1 through 4 and Method 7 of 40 CFR Part 60, Appendix A, and for carbon monoxide, Methods 1 through 4 and Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division.

Facility Name: **The Timken Company - Steel Plant**

Facility ID: **15-76-00-0613**

Emissions Unit: **Ladle Preheater #2 (P119)**

## **V. Testing Requirements (continued)**

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P119). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Ladle Preheater #3 (P120)  
**Activity Description:** Preheats ladles

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ladle Preheater #3; formerly (P020). Natural gas fired with low NOx burner control; 10.0 mmBtu/hr input.	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	Particulate emissions shall not exceed 0.020 lb/mmBtu and 0.876 ton/yr.  Nitrogen oxide emissions shall not exceed 0.10 lb/mmBtu and 4.38 tons/yr.  Carbon monoxide emissions shall not exceed 0.02 lb/mmBtu and 0.876 ton/yr.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(B) and 3745-17-08(B).
	OAC rule 3745-17-07(B)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.
	OAC rule 3745-17-11	See section A.I.2.c.
	OAC rule 3745-17-08(B)	See section A.I.2.d.
	OAC rule 3745-18-06(E)(1)	See section A.I.2.e.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weigh input.

##### 2. Additional Terms and Conditions

- 2.a Visible particulate emission of fugitive dust shall not exceed 20% as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

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

- 2.b** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c** No process weight rate can be determined and the particulate matter uncontrolled mass rate of emissions (UMRE) is less than 10 pounds per hour; therefore, there is no applicable particulate emission limit from OAC rule 3745-17-11.
- 2.d** The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall consist of the use of only natural gas as fuel for this emissions unit.

If the permittee can demonstrate compliance with the fuel burning restriction outlined above, the employment of the permittee's RACM, in accordance with the requirements of OAC rule 3745-17-08(B), will be deemed adequate.

- 2.e** No process weight rate can be determined; therefore, there is no applicable sulfur dioxide limit specified by OAC rule 3745-18-06(E)(1).

## **II. Operational Restrictions**

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

## **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.
- 2. The permittee shall maintain a monthly record of the number of hours the emissions unit was in operation.
- 3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 daily 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.

## **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.

#### **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 the egress points (i.e., building windows, doors, roof monitors, etc.) serving 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 Canton City Health Department, Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit the required deviation (excursion) reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
4. All reports shall be submitted to the Canton Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

#### **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:

Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance may be determined by multiplying the particulate emission factor of 1.9 lbs/mmscf by the maximum hourly natural gas firing capacity of the emissions unit, in mmscf/hr, and then dividing by the maximum rated heat input capacity (10.0 mmBtu/hr). The particulate emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

**1.b** Emission Limitation:

Nitrogen oxide emissions shall not exceed 0.10 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be demonstrated by dividing the nitrogen oxides emission factor of 50 lbs/mmscf of natural gas by the heating value of natural gas per cu. ft. The nitrogen oxides emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-1 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 7.

**1.c** Emission Limitation:

Nitrogen oxide emissions shall not exceed 4.38 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.10 lb/mmBtu by the maximum rated heat input capacity of 10.0 mmBtu/hr, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**V. Testing Requirements (continued)**

**1.d** Emission Limitation:

Carbon monoxide emissions shall not exceed 0.02 lb/mmBtu of actual heat input.

Applicable Compliance Method:

If required, compliance shall be demonstrated by performing a stack test in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10.

**1.e** Emission Limitation:

Carbon monoxide emissions shall not exceed 0.876 ton/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.02 lb/mmBtu by the maximum rated heat input capacity of 10.0 mmBtu/hr, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.f** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible particulate emission observations of fugitive dust performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

**1.g** Emission Limitation:

Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

Applicable Compliance Method:

Compliance with this limitation will be assumed to be successfully demonstrated due to the high allowable emission limitation and the very low amount of sulfur dioxide emitted from the combustion of natural gas.

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

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates, nitrogen oxides, and carbon monoxide.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A, for nitrogen oxides, Methods 1 through 4 and Method 7 of 40 CFR Part 60, Appendix A, and for carbon monoxide, Methods 1 through 4 and Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division.

Facility Name: **The Timken Company - Steel Plant**

Facility ID: **15-76-00-0613**

Emissions Unit: **Ladle Preheater #3 (P120)**

## **V. Testing Requirements (continued)**

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P120). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Ladle Preheater #4 (P121)  
**Activity Description:** Preheats ladles

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ladle Preheater #4; formerly (P021). Natural gas fired with low NOx burner control; 10.0 mmBtu/hr input.	OAC rule 3745-31-05(A)(3) (PTI 15-0144)	Particulate emissions shall not exceed 0.020 lb/mmBtu and 0.876 ton/yr.  Nitrogen oxide emissions shall not exceed 0.10 lb/mmBtu and 4.38 tons/yr.  Carbon monoxide emissions shall not exceed 0.02 lb/mmBtu and 0.876 ton/yr.
	OAC rule 3745-17-07(B)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(B) and 3745-17-08(B). See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.
	OAC rule 3745-17-11	See section A.I.2.c.
	OAC rule 3745-17-08(B)	See section A.I.2.d.
	OAC rule 3745-18-06(E)(1)	See section A.I.2.e.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weigh input.

##### 2. Additional Terms and Conditions

- 2.a Visible particulate emission of fugitive dust shall not exceed 20% as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

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

- 2.b** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c** No process weight rate can be determined and the particulate matter uncontrolled mass rate of emissions (UMRE) is less than 10 pounds per hour; therefore, there is no applicable particulate emission limit from OAC rule 3745-17-11.
- 2.d** The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall consist of the use of only natural gas as fuel for this emissions unit.

If the permittee can demonstrate compliance with the fuel burning restriction outlined above, the employment of the permittee's RACM, in accordance with the requirements of OAC rule 3745-17-08(B), will be deemed adequate.

- 2.e** No process weight rate can be determined; therefore, there is no applicable sulfur dioxide limit specified by OAC rule 3745-18-06(E)(1).

## **II. Operational Restrictions**

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

## **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.
- 2. The permittee shall maintain a monthly record of the number of hours the emissions unit was in operation.
- 3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 daily 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.

## **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.

#### **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 the egress points (i.e., building windows, doors, roof monitors, etc.) serving 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 Canton City Health Department, Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit the required deviation (excursion) reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
4. All reports shall be submitted to the Canton Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

#### **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:

Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance may be determined by multiplying the particulate emission factor of 1.9 lbs/mmscf by the maximum hourly natural gas firing capacity of the emissions unit, in mmscf/hr, and then dividing by the maximum rated heat input capacity (10.0 mmBtu/hr). The particulate emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

**1.b** Emission Limitation:

Nitrogen oxide emissions shall not exceed 0.10 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be demonstrated by dividing the nitrogen oxides emission factor of 50 lbs/mmscf of natural gas by the heating value of natural gas per cu. ft. The nitrogen oxides emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-1 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 7.

**1.c** Emission Limitation:

Nitrogen oxide emissions shall not exceed 4.38 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.10 lb/mmBtu by the maximum rated heat input capacity of 10.0 mmBtu/hr, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**V. Testing Requirements (continued)**

**1.d** Emission Limitation:

Carbon monoxide emissions shall not exceed 0.02 lb/mmBtu of actual heat input.

Applicable Compliance Method:

If required, compliance shall be demonstrated by performing a stack test in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10.

**1.e** Emission Limitation:

Carbon monoxide emissions shall not exceed 0.876 ton/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable emission limitation of 0.02 lb/mmBtu by the maximum rated heat input capacity of 10.0 mmBtu/hr, and by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.f** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible particulate emission observations of fugitive dust performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

**1.g** Emission Limitation:

Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

Applicable Compliance Method:

Compliance with this limitation will be assumed to be successfully demonstrated due to the high allowable emission limitation and the very low amount of sulfur dioxide emitted from the combustion of natural gas.

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

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates, nitrogen oxides, and carbon monoxide.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A, for nitrogen oxides, Methods 1 through 4 and Method 7 of 40 CFR Part 60, Appendix A, and for carbon monoxide, Methods 1 through 4 and Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division.

Facility Name: **The Timken Company - Steel Plant**

Facility ID: **15-76-00-0613**

Emissions Unit: **Ladle Preheater #4 (P121)**

## **V. Testing Requirements (continued)**

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P121). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Soaking Pit #12 (P123)  
**Activity Description:** Heats steel

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Soaking Pit #12, oxy-fuel gas burners, 14 mmBtu each. Formerly (P023). Exhaust gasses vented through stack P123S-1	OAC rule 3745-31-05(A)(3) (PTI 15-1157)	Particulate emissions shall not exceed 0.091 lb/hr and 0.4 ton/yr.
		Organic compound emissions shall not exceed 0.085 lb/hr and 0.372 ton/yr.
		Nitrogen oxide emissions shall not exceed 2.058 lbs/hr, 0.147 lb/mmBtu, and 9.0 tons/yr.
		Carbon monoxide emissions shall not exceed 0.515 lb/hr and 2.26 tons/yr.
	OAC rule 3745-17-07(A)(1)	See section A.I.2.a.
OAC rule 3745-17-11	See section A.I.2.b.	
OAC rule 3745-18-06(E)(1)	See section A.I.2.c.	
40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80 lbs/ton of actual process weight rate.	

##### 2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.b No process weight rate can be determined and the particulate matter uncontrolled mass rate of emissions (UMRE) is less than 10 pounds per hour; therefore, there is no applicable particulate emission limit from OAC rule 3745-17-11.
- 2.c No process weight rate can be determined; therefore, there is no applicable sulfur dioxide limit specified by OAC rule 3745-18-06(E)(1).

## II. Operational Restrictions

1. The permittee shall burn only oxy-fuel as fuel in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than oxygen/natural gas, the permittee shall maintain a record of the type and quantity of the fuel burned in this emissions unit.
2. The permittee shall maintain a monthly record of the number of hours the emissions unit was in operation.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than oxygen/natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. **None**
3. The permittee shall submit the required deviation (excursion) reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
4. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## 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:

Particulate emissions shall not exceed 0.091 lb/hr.

Applicable Compliance Method:

Compliance may be determined by multiplying the particulate emission factor of 1.9 lbs/mmscf by the maximum hourly natural gas firing capacity of the emissions unit, in mmscf/hr. The particulate emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

### 1.b Emission Limitation:

Particulate emissions shall not exceed 0.4 ton/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation of 0.091 lb/hr by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**V. Testing Requirements (continued)**

**1.c** Emission Limitation:

Organic compound emissions shall not exceed 0.085 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.2.

**1.d** Emission Limitation:

Organic compound emissions shall not exceed 0.372 ton/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation of 0.085 lb/hr by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.e** Emission Limitation:

Nitrogen oxide emissions shall not exceed 2.058 lbs/hr and 0.147 lb/mmBtu.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.2.

**1.f** Emission Limitation:

Nitrogen oxide emissions shall not exceed 9.0 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation of 2.058 lbs/hr by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.g** Emission Limitation:

Carbon monoxide emissions shall not exceed 0.515 lb/hr.

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the carbon monoxide emission factor of 36.75 lbs/mmscf by the maximum fuel flow, in mmscf/hr. This emission factor was provided by the manufacturer of the emissions unit.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10 and the procedures specified in OAC rule 3745-17-03(B)(9).

## V. Testing Requirements (continued)

### 1.h Emission Limitation:

Carbon monoxide emissions shall not exceed 2.26 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation of 0.515 lb/hr by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

### 1.i Emission Limitation:

Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

Applicable Compliance Method:

Compliance with this limitation will be assumed to be successfully demonstrated due to the high allowable emission limitation and the very low amount of sulfur dioxide emitted from the combustion of natural gas.

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

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

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for nitrogen oxides and organic compounds.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for nitrogen oxides, Methods 1 through 4 and Method 7 of 40 CFR Part 60, Appendix A, and for organic compounds, Methods 1 through 4 and Method 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division.

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P123). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

Facility Name: **The Timken Company - Steel Plant**  
Facility ID: **15-76-00-0613**  
Emissions Unit: **Soaking Pit #12 (P123)**

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Soaking Pit #11 (P124)  
**Activity Description:** Heats steel

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Soaking Pit #11, oxy-fuel gas burners, 14 mmBtu each. Formerly (P024). Exhaust gasses vented through stack P124S-1	OAC rule 3745-31-05(A)(3) (PTI 15-1162)	Particulate emissions shall not exceed 0.091 lb/hr and 0.4 ton/yr.
		Organic compound emissions shall not exceed 0.085 lb/hr and 0.372 ton/yr.
		Nitrogen oxide emissions shall not exceed 2.058 lbs/hr, 0.147 lb/mmBtu, and 9.0 tons/yr.
		Carbon monoxide emissions shall not exceed 0.515 lb/hr and 2.26 tons/yr.
	OAC rule 3745-17-07(A)(1)	See section A.I.2.a.
	OAC rule 3745-17-11	See section A.I.2.b.
	OAC rule 3745-18-06(E)(1)	See section A.I.2.c.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80 lbs/ton of actual process weight rate.

##### 2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.b No process weight rate can be determined and the particulate matter uncontrolled mass rate of emissions (UMRE) is less than 10 pounds per hour; therefore, there is no applicable particulate emission limit from OAC rule 3745-17-11.
- 2.c No process weight rate can be determined; therefore, there is no applicable sulfur dioxide limit specified by OAC rule 3745-18-06(E)(1).

## II. Operational Restrictions

1. The permittee shall burn only oxy-fuel as fuel in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than oxygen/natural gas, the permittee shall maintain a record of the type and quantity of the fuel burned in this emissions unit.
2. The permittee shall maintain a monthly record of the number of hours the emissions unit was in operation.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than oxygen/natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. **None**
3. The permittee shall submit the required deviation (excursion) reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
4. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## 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:

Particulate emissions shall not exceed 0.091 lb/hr.

Applicable Compliance Method:

Compliance may be determined by multiplying the particulate emission factor of 1.9 lbs/mmscf by the maximum hourly natural gas firing capacity of the emissions unit, in mmscf/hr. The particulate emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

### 1.b Emission Limitation:

Particulate emissions shall not exceed 0.4 ton/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation of 0.091 lb/hr by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**V. Testing Requirements (continued)**

**1.c** Emission Limitation:

Organic compound emissions shall not exceed 0.085 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.2.

**1.d** Emission Limitation:

Organic compound emissions shall not exceed 0.372 ton/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation of 0.085 lb/hr by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.e** Emission Limitation:

Nitrogen oxide emissions shall not exceed 2.058 lbs/hr and 0.147 lb/mmBtu.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test methods and procedures specified in section A.V.2.

**1.f** Emission Limitation:

Nitrogen oxide emissions shall not exceed 9.0 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation of 2.058 lbs/hr by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

**1.g** Emission Limitation:

Carbon monoxide emissions shall not exceed 0.515 lb/hr.

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the carbon monoxide emission factor of 36.75 lbs/mmscf by the maximum fuel flow, in mmscf/hr. This emission factor was provided by the manufacturer of the emissions unit.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10 and the procedures specified in OAC rule 3745-17-03(B)(9).

## V. Testing Requirements (continued)

### 1.h Emission Limitation:

Carbon monoxide emissions shall not exceed 2.26 tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation of 0.515 lb/hr by the actual annual hours of operation, and then dividing by 2000 lbs/ton.

### 1.i Emission Limitation:

Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

Applicable Compliance Method:

Compliance with this limitation will be assumed to be successfully demonstrated due to the high allowable emission limitation and the very low amount of sulfur dioxide emitted from the combustion of natural gas.

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

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

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for nitrogen oxides and organic compounds.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for nitrogen oxides, Methods 1 through 4 and Method 7 of 40 CFR Part 60, Appendix A, and for organic compounds, Methods 1 through 4 and Method 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division.

Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division 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 shall be prepared that gives an accurate account of the test results, test equipment description, emissions unit operating parameters and analytical calculations. The report shall include a description of the emissions unit and the proper Ohio EPA identification, i.e. (P124). The test report shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

Facility Name: **The Timken Company - Steel Plant**  
Facility ID: **15-76-00-0613**  
Emissions Unit: **Soaking Pit #11 (P124)**

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Slag Processing (Z101)  
**Activity Description:** Slag processing

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Slag Processing Equipment. Controlled by EAF baghouse (BHC-1)	OAC rule 3745-17-07(A)	See section A.I.2.a.
	OAC rule 3745-17-11	Particulate emissions shall not exceed 14.5 lbs/hr. (from Figure II)
	OAC rule 3745-17-07(B)(1)	See section A.I.2.b.
	OAC rule 3745-17-08(B)	See section A.I.2.c.

##### 2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
- 2.c The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM). These measures shall include, but not be limited to, the following:
  - i. the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust; and
  - ii. the collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.
- 2.d If the permittee can demonstrate compliance with the visible emission restriction contained in section A.I.2.b, the employment of the permittee's RACM, in accordance with the requirements of section A.I.2.c, will be deemed adequate.
- 2.e This emissions unit is a "new source," as defined in OAC rule 3745-31-01, that has not obtained a permit to install in accordance with OAC rule 3745-31-02. (See A.VI.1.) The emission limitations specified in sections A.I.1 and A.I.2 will serve only as interim emission limitations until a permit to install is issued that defines "best available technology," pursuant to OAC rule 3745-31-05.

## II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 3.0 to 6.0 inches of water while the emissions unit is in operation.

## 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 daily basis while the emissions unit is operating.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 daily 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.

## 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 in section A.II.1, as well as the corrective actions that were taken to achieve compliance.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving 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 Canton City Health Department, Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month period.

## 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:

## **V. Testing Requirements (continued)**

### **1.a** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible particulate emission observations of fugitive dust performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible emissions determination shall include all non-stack egress points from the building housing this emissions unit. Such egress points shall include, but not be limited to, doorways, windows and roof monitors.

### **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:

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

### **1.c** Emission Limitation:

Particulate emissions shall not exceed 14.5 lbs/hr.

Applicable Compliance Method:

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

## **VI. Miscellaneous Requirements**

- 1.** The permittee installed this emissions unit in 1985 without first applying for and obtaining a permit to install (PTI), in violation of OAC rule 3745-31-02. As the initial step to allow this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete PTI application within 30 days after issuance of this permit.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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 Metal Transfer (Z102)

**Activity Description:** Hot Metal Transfer

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Hot Metal Transfer	OAC rule 3745-17-07(A)	See section A.I.2.a.
	OAC rule 3745-17-11	Particulate emissions shall not exceed 4.3 lbs/hr. (from Figure II)
	OAC rule 3745-17-07(B)(1)	See section A.I.2.b.
	OAC rule 3745-17-08(B)	See section A.I.2.c.

##### 2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
- 2.c The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM). These measures shall include, but not be limited to, the following:
  - i. the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust; and
  - ii. the collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.
- 2.d If the permittee can demonstrate compliance with the visible emission restriction contained in section A.I.2.b, the employment of the permittee's RACM, in accordance with the requirements of section A.I.2.c, will be deemed adequate.
- 2.e This emissions unit is a "new source," as defined in OAC rule 3745-31-01, that has not obtained a permit to install in accordance with OAC rule 3745-31-02. (See A.VI.1.) The emission limitations specified in sections A.I.1 and A.I.2 will serve only as interim emission limitations until a permit to install is issued that defines "best available technology," pursuant to OAC rule 3745-31-05.

## II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 3.0 to 6.0 inches of water while the emissions unit is in operation.

## 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 daily basis while the emissions unit is operating.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 daily 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.

## 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 in section A.II.1, as well as the corrective actions that were taken to achieve compliance.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving 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 Canton City Health Department, Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month period.

## 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:

## **V. Testing Requirements (continued)**

### **1.a** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible particulate emission observations of fugitive dust performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible emissions determination shall include all non-stack egress points from the building housing this emissions unit. Such egress points shall include, but not be limited to, doorways, windows and roof monitors.

### **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:

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

### **1.c** Emission Limitation:

Particulate emissions shall not exceed 4.3 lbs/hr.

Applicable Compliance Method:

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

## **VI. Miscellaneous Requirements**

- 1.** The permittee installed this emissions unit in 1985 without first applying for and obtaining a permit to install (PTI), in violation of OAC rule 3745-31-02. As the initial step to allow this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete PTI application within 30 days after issuance of this permit.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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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