



State of Ohio Environmental Protection Agency

Street Address:

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

07/31/01

CERTIFIED MAIL

**RE: Preliminary Proposed Title V
Chapter 3745-77 permit**

15-76-05-0694
RepublicTechnologies International, LLC - 8th Street
Eric D. Howland
2633 8th Street NE
Canton, OH 44704

Dear Eric D. Howland:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 06/08/00. The comment period for the Draft permit has ended. We are now ready to submit this permit to USEPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written, you now have the opportunity to raise your concerns. **Please submit, in writing, any comments you may have within fourteen (14) days from your receipt of this letter to:**

Ohio Environmental Protection Agency
Jim Orlemann, Manager, Engineering Section
Division of Air Pollution Control
P.O.Box 1049
Columbus, OH 43216-1049

and

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

Also, if you believe that it is necessary to have an informal conference with us, then, as part of your written comments, you should request a conference concerning the written comments.

If comments are not submitted within fourteen (14) days of your receipt of this letter, we will forward the proposed permit to USEPA for approval. All comments received will be carefully considered before proceeding to the proposed permit.

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: Canton Division of Air Pollution Control
File, DAPC PMU



State of Ohio Environmental Protection Agency

PRELIMINARY PROPOSED TITLE V PERMIT

Issue Date: 07/31/01

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: 15-76-05-0694 to: RepublicTechnologies International, LLC - 8th Street 2633 Eighth Street NE Canton, OH 44704

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 units like B001 (Boiler #1), P074 (#10 Grinder at #5 Steel Conditioning), P123 (CRP - Ladle Metallurgical Facility), etc.

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.

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

Christopher Jones Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping 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.
- 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.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. 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. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
 - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, 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. 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,

recordkeeping, 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.

- 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 are true, accurate, and complete.

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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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

3. Risk Management Plans

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

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.

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.

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. 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.

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.

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.

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.

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 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.

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.

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 appropriate Ohio EPA District Office or local air agency 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.

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.

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).

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.

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, 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; and
- 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 further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

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.

18. Insignificant Activity

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

B. State Only Enforceable Section

1. 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.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping 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 (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. 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.)

3. 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.

4. 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.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction 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).

6. 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.

7. 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.

8. 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 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:

F002 - plant storage piles
F005 - melt shop slag handling
F006 - melt shop baghouse dust handling
G001 - gasoline and diesel sources
K001 - paint booth - electric repair
L001 - S-K unit cleaner #34
L002 - S-K unit cleaner #35
L005 - S-K unit cleaner #68
L008 - S-K unit cleaner #76
L015 - S-K unit cleaner #30
L020 - S-K unit cleaner #39
L021 - S-K unit cleaner #40
L022 - S-K unit cleaner #43
L023 - S-K unit cleaner #44
L024 - S-K unit cleaner #45
L026 - S-K unit cleaner #48
L028 - S-K unit cleaner #50
L031 - S-K unit cleaner #71
L032 - S-K unit cleaner #72
L033 - S-K unit cleaner #73
L035 - S-K unit cleaner #75
L036 - S-K unit cleaner #80
L037 - S-K unit cleaner #114
L040 - S-K unit cleaner #118
L041 - S-K unit cleaner #119
L042 - S-K unit cleaner #120

B. State Only Enforceable Section (continued)

L043 - S-K unit cleaner #N&T
L046 - S-K unit cleaner #200
L049 - S-K unit cleaner #203
L050 - S-K unit cleaner #204
L053 - S-K unit cleaner #208
P034 - ball bottom anneal furnace #1
P036 - bar coil pickle 1 & 2
P039 - #1 forge furnace
P054 - met lab fume hood #1 East
P055 - met lab fume hood #1 North
P066 - no. 22 coil heat treat furnace
P085 - ball bottom anneal furnace #2
P086 - ball bottom anneal furnace #3
P087 - ball bottom anneal furnace #4
P088 - ball bottom anneal furnace #5
P089 - ball bottom anneal furnace #6
P090 - ball bottom anneal furnace #7
P091 - ball bottom anneal furnace #11
P092 - ball bottom anneal furnace #12
P093 - ball bottom anneal furnace #13
P097 - car type box anneal/tempering #6
P098 - car type box anneal/tempering #7
P100 - car type box anneal/tempering #9
P105 - atmospheric annealing furnace
P108 - #2 test furnace
P109 - #3 forge furnace
P110 - #4 forge furnace
P111 - #2 anneal furnace
P112 - #1 tool furnace

P113 - #2 tool furnace
P114 - #1 mech HT furnace
P115 - #2 mech HT furnace & #2 draw furnace
P116 - #3 test furnace
P119 - met lab fume hood - etch house
P120 - met lab fume hood #1 East (South)
P121 - met lab fume hood 3rd floor
P122 - #1 draw furnace
P124 - CRP - vacuum tank degasser (VTD)
P125 - continuous caster area
P127 - CRP - sample grinder
P145 - torch cutoff
P150 - Tundish preheater #1
P151 - Tundish preheater #2
P908 - truck dumping
Z004 - scrap preparation torch cutting
Z006 - spray painting
Z007 - #2 draw test furnace
Z008 - blacksmith oil quench
Z009 - bar finish oil dip tank
Z010 - 8" shipping oil dip tank
Z013 - test saw
Z016 - shot blasting at open hearth
Z017 - blast unit - met lab

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 (B001)
Activity Description: Steam generation

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>
Boiler #1, Babcock and Wilcox model FM, 170 mmBtu/hr, fired with natural gas	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)(1)	.020 lb of particulate emissions per mmBtu of actual heat input
	40 CFR Part 52.1881(b)(27)(iii)	4.40 lbs of sulfur dioxide per mmBtu actual heat input

2. Additional Terms and Conditions

None

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

- 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

- The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
- The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
- 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

- 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:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emissions 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.b Emission Limitation:

.020 lb of particulate emissions per mmBtu of actual heat input

Applicable Compliance Method:

If required, compliance shall be demonstrated by performing emission tests in accordance with 40 CFR Part 60, Appendix A, Method 5. Dividing the USEPA's AP-42 emission factor of 1.9 lbs of particulate emissions per mmscf of natural gas (Section 1.4, Table 1.4-2 (7/98)) by the heat content of the natural gas, 1040 Btu per scf, results in an emission rate of 0.0018 lb of particulate emissions per mmBtu.

1.c Emission Limitation:

4.40 lbs of sulfur dioxide per mmBtu actual heat input

Applicable Compliance Method:

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

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 (B002)
Activity Description: Steam generation

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>
Boiler #2, Babcock and Wilcox model FM, 170 mmBtu/hr, fired with natural gas	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)(1)	.020 lb of particulate emissions per mmBtu of actual heat input
	40 CFR Part 52.1881(b)(27)(iii)	4.40 lbs of sulfur dioxide per mmBtu actual heat input

2. Additional Terms and Conditions

None

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

- 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

- The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
- The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
- 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

- 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:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emissions 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.b Emission Limitation:

.020 lb of particulate emissions per mmBtu of actual heat input

Applicable Compliance Method:

If required, compliance shall be demonstrated by performing emission tests in accordance with 40 CFR Part 60, Appendix A, Method 5. Dividing the USEPA's AP-42 emission factor of 1.9 lbs of particulate emissions per mmscf of natural gas (Section 1.4, Table 1.4-2 (7/98)) by the heat content of the natural gas, 1040 Btu per scf, results in an emission rate of 0.0018 lb of particulate emissions per mmBtu.

1.c Emission Limitation:

4.40 lbs of sulfur dioxide per mmBtu actual heat input

Applicable Compliance Method:

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

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 (F001)
Activity Description: Vehicular Traffic on Plant Roadways and Parking Areas

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>
roadways and parking areas: approximately 16 miles of paved and unpaved roadways and 19 acres of paved and unpaved parking areas used by vehicles with 4 to 18 wheels		
paved roadways and parking areas (see section A.1.2.a)	OAC rule 3745-17-07(B)(8)(a)	There shall be no visible fugitive particulate emissions from any paved roadway or parking area greater than 10% opacity.
	OAC rule 3745-17-08(B)(8)	reasonably available control measures (see sections A.1.2.c, A.1.2.d, A.1.2.e, and A.1.2.i)
unpaved roadways and parking areas (see section A.1.2.b)	OAC rule 3745-17-07(B)(8)(a)	There shall be no visible fugitive particulate emissions from any unpaved roadway or parking area greater than 10% opacity.
	OAC rule 3745-17-08(B)(2)	reasonably available control measures (see sections A.1.2.f through A.1.2.i)

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:

- 1 - main entrance: road west to M&E office, main entrance, by 12" mill to hot metal bridge, truck hopper around stripper building to WQCC to Trump Rd. and around #5 steel conditioning
- 2 - west end of plant
- 3 - road between #4 steel conditioning and #2 steel conditioning
- 4 - road to 8" mill
- 6 - road between bottom pour and 35" mill
- 8 - road to #4 and #3 melt shop
- 9 - north side #3 melt shop, small stretch east
- 10 - east side of #4 melt shop
- 11 - southeast side of #4 melt shop
- 18 - inventory storage area southwest end of plant near 8th Street
- 19 - inventory storage area west end of plant
- 22 - cast-roll (TM) facility

paved parking areas:

- C - roll shop
- D - carpenter shop
- F - M&E office
- H - WQCC (Water Quality Control Center)
- J - main lot, west
- K - machine shop
- L - met/chem lab
- M - main lot, east
- N - main lot, north
- O - main lot, south
- R - 35" mill, central
- V - meter shop
- AA - melt shop
- AH - cast roll (TM) facility

The paved road segments and parking areas listed above are shown schematically in the plot plan, dated 06/05/96, which is included as part of the permittee's Title V application.

2. Additional Terms and Conditions (continued)

- 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:

- 5 - WQCC to #1 steel cond.
- 7 - road between #4 baghouse and #4 melt shop
- 12 - mobile repair to Heckett Road
- 13 - boiler house
- 14 - slag landfill roads
- 15 - power house road, west
- 16 - power house road, east
- 18 - inventory storage area, southwest end of plant near 8th Street
- 20 - inventory storage area, northeast end of plant
- 21 - inventory storage area, north central end of plant

unpaved parking areas:

- A - swing grind
- B - bar finish
- E - heat treat
- G - heat treat/bar finish
- I - 8" mill
- P - 12" mill
- Q - 35" mill, north
- S - 35" mill, south
- T - 35" mill, bury pits
- U - safety/transportation
- W - bottom pour
- X - boiler house
- Y - mobile repair
- Z - chem lab
- AB - teeming
- AC - caster
- AD - Airco
- AE - #5 steel conditioning
- AG - straddle buggy lot

The unpaved road segments and parking areas listed above are shown schematically in the plot plan, dated 06/05/96, which is included as part of the permittee's Title V application.

- 2.c** All paved roadways and parking areas shall be swept and/or treated with water to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic and to ensure compliance with the above-mentioned visible emission limitation.
- 2.d** 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.e** The unpaved shoulders of all paved roadways shall be treated with water and/or any other suitable dust suppression chemicals to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic and to ensure compliance with the above-mentioned visible emission limitation.
- 2.f** All unpaved roadways and parking areas shall be treated with water and/or any other suitable dust suppression chemicals to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic and to ensure compliance with the above-mentioned visible emission limitation.

2. Additional Terms and Conditions (continued)

- 2.g** The control measures shall be implemented at frequencies that will minimize or eliminate visible emissions of fugitive dust generated by vehicular traffic and ensure compliance with the above-mentioned visible emission limitations, and the needed frequencies of implementation shall be determined by the permittee's inspections. It is further understood that on any specific day 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 minimize or eliminate visible emissions of fugitive dust generated by vehicular traffic and to ensure compliance with the above-mentioned visible emission limitations.
- 2.h** 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 considered as a paved roadway or parking area, and controlled with the control measure specified above for paved surfaces. Such unpaved roadway or parking area shall remain subject to the visible emission limitation for unpaved roadways and parking areas.
- 2.i** Open-bodied vehicles transporting materials likely to become airborne, excluding the transporting of molten EAF slag, shall have such materials covered at all times if the control measure is necessary to minimize or eliminate visible emissions of fugitive dust.

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:

1.a paved roadways: minimum required frequency:

- 1 weekly
- 2 weekly
- 3 weekly
- 4 weekly
- 6 weekly
- 8 weekly
- 9 weekly
- 10 weekly
- 11 weekly
- 18 weekly
- 19 weekly
- 22 weekly

1.b paved parking areas: minimum required frequency:

- C weekly
- D weekly
- F weekly
- H weekly
- J weekly
- K weekly
- L weekly
- M weekly
- N weekly
- O weekly
- R weekly
- V weekly
- AA weekly
- AH weekly

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

1.c	unpaved roadways:	minimum required frequency:
	5	daily
	7	daily
	12	daily
	13	daily
	14	daily
	15	daily
	16	daily
	18	daily
	20	daily
	21	daily

1.d	unpaved parking areas:	minimum required frequency
	A	daily
	B	daily
	E	daily
	G	daily
	I	daily
	P	daily
	Q	daily
	S	daily
	T	daily
	U	daily
	W	daily
	X	daily
	Y	daily
	Z	daily
	AB	daily
	AC	daily
	AD	daily
	AE	daily
	AG	daily

1.e The purpose of the inspections is to determine the need for implementing the control measures specified in section A.I.2. 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 minimize or eliminate visible emissions of fugitive dust generated by vehicular traffic and to ensure compliance with the above-mentioned visible emission limitations. 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.

1.f The permittee may, upon receipt of written approval from the Canton City Health Department, Air Pollution Control Division, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to minimize or eliminate visible emissions of fugitive dust generated by vehicular traffic and to ensure compliance with the above-mentioned visible emission limitations.

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

2. 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.
3. The information required in section A.III.2.d, above, 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 quarterly deviation reports that identify any of the following occurrences:
 - a. each day or week, as applicable, 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 paragraph A.1.c. of the General Terms and Conditions.
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:

There shall be no visible particulate emissions from any paved roadway or parking area greater than 10% opacity as determined by the compliance method below.

Applicable Compliance Method:

Compliance shall be demonstrated using the procedures specified in 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.

1.b Emission Limitation:

There shall be no visible particulate emissions from any unpaved road or parking area greater than 10% opacity as determined by the compliance method below.

Applicable Compliance Method:

Compliance shall be demonstrated using the procedures specified in 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.

Facility Name: **Republic Engineered Steels, Inc. - Canton Works**
Facility ID: **15-76-05-0694**
Emissions Unit: **Roadways and Parking Areas (F001)**

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: Conventional Teeming (F003)
Activity Description: Conventional teeming in #3 and #4 melt shops

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>
conventional teeming aisle #3 controlled by the #3 melt shop baghouse (BGH02)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(3)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	0.0052 grain of particulate emissions per dry standard cubic foot of exhaust gases, and see A.I.2.c and A.I.2.e below.
conventional teeming aisle #4 controlled by the #4 melt shop baghouse (BGH01)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(3)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.d below.
	OAC rule 3745-17-11	10 lbs/hr of particulate emissions
		See A.I.2.f below.

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 6-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.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 for the conventional teeming aisle #3 shall include the following:

- i. the capture of fugitive particulate emissions using canopy hoods; and
- ii. the control of fugitive particulate emissions using a baghouse (BGH02) with an outlet emission rate of not greater than 0.0052 gr/dscf.

The collection efficiency shall be 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 permittee's employment of RACM, at a minimum, for the conventional teeming aisle #4 shall consist of the capture of the fugitive particulate emissions using canopy hoods (i.e., building evacuation).
- 2.e** Emissions units F003, P064, P068, P902, P903, and Z027 shall be vented to the #3 melt shop baghouse. The total allowable outlet emission rate from this baghouse, in accordance with the RACM determination, shall not exceed 0.0052 gr/dscf.
- 2.f** The particulate emission rate for the #4 teeming aisle (BGH01) is regulated under OAC rule 3745-17-11, since this teeming aisle had stack emissions prior to 1972. The permittee shall comply with the more restrictive requirement of either Table 1 or Figure II. Based on calculations using AP-42 emission factor from section 12.5 of 0.07 lb/ton, Figure II does not apply because the uncontrolled mass rate of emissions (UMRE) was determined to be less than 10 lbs/hr. Since the limit from Table 1, based on process weight rate, is greater than 10 lbs/hr, the allowable limit of 10 lbs/hr of particulate matter was established to ensure that Figure II will not become applicable to this emissions unit.

II. Operational Restrictions

1. The pressure drop across baghouses BGH01 and BGH02 shall be maintained within the manufacturer's recommended range of 4 to 8 inches of water for BGH01 and 2 to 9 inches of water for BGH02, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established during the next emission testing required in section A.V.2. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 1 month after completion of the emission testing.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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 baghouses BGH01 and BGH02 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 each baghouse on a daily basis.
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 any non-stack egress point (e.g., windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across either or both baghouses BGH01 and BGH02 did not comply with the allowable ranges specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
3. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.
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.2 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:

20% opacity as a 6-minute average (stack emissions)

Applicable Compliance Method:

Compliance shall be determined through visible emissions 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.b Emission Limitation:

20% opacity as a 6-minute average (fugitive emissions)

Applicable Compliance Method:

Compliance shall be determined through visible emissions 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). The points of observation for visible particulate fugitive emissions shall include any non-stack egress points from the building. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.
 - 1.c Emission Limitation:

0.0052 grain of particulate emissions per dry standard cubic foot of exhaust (teeming aisle #3 - BGH02)

Applicable Compliance Method:

Compliance shall be determined through emission tests performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).
 - 1.d Emission Limitation:

10 lbs/hr particulate emissions (teeming aisle #4 - BGH01)

Applicable Compliance Method:

Compliance shall be determined through emission tests performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months after issuance of this permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable visible particulate emission limitation and the allowable mass emission rates for particulates (for both BGH01 and BGH02).
 - c. The following parameter also shall be monitored and recorded during the emission testing: the pressure drop across each baghouse.
 - d. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:
 - i. for the visible particulate emission limitations, Method 9 of 40 CFR Part 60, Appendix A; and
 - ii. for the allowable mass emission rates for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A.
 - e. The tests shall be conducted while the emissions units identified in A.I.2.e are operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

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

Personnel from the CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD 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 CCHD, APCD.

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: 12" Mill No. 1 Furnace (P006)
Activity Description: Billet reheating furnace

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>
12" mill no. 1 billet reheat furnace, fired with natural gas and rated at 131 mmBtu/hr	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-11	See A.I.2.b below.
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.c below.

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.
- The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rules 3745-17-01(B)(14) and 3745-17-11(A)(4), is equal to zero.
- Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

- 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

- The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
- The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
- 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. Emission Limitation:

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

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials (steel billets) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

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: 12" Mill No. 2 Furnace (P007)
Activity Description: Billet reheating furnace

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>
12" mill no. 2 billet reheat furnace, fired with natural gas and rated at 131 mmBtu/hr	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-11	See A.I.2.b below.
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.c below.

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.
- The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rules 3745-17-01(B)(14) and 3745-17-11(A)(4), is equal to zero.
- Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

- 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

- The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
- The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
- 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. Emission Limitation:

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

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials (steel billets) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

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: No. 2 Roller Hearth Quench Furnace (P037)
Activity Description: Steel heat treating furnace

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>
no. 2 roller hearth quench furnace, 13.56 mmBtu/hr, fired with natural gas	OAC rule 3745-17-07(B)(1)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.c below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions shall not exceed 20% opacity 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.b The permittee shall minimize or eliminate visible 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 the furnace.
- 2.c Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

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 quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
2. The permittee shall submit the required deviation (excursion) reports in accordance with 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.2 of these terms and conditions shall be determined in accordance with the following method:

- 1.a Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). 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.

- 1.b Emission Limitation:

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

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials (steel billets, slabs, coils, and steel bars) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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: #4 Steel Conditioning Torch Cutting (P061)
Activity Description: Torch cutting machine for specialty ingots

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 steel conditioning torch cutting (L-Tec torch cutting machine) controlled by the #4 steel conditioning torch cutting settling chamber (SCH01) and the #4 steel conditioning torch cutting baghouse (BGH04)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.b below.
	OAC rule 3745-17-08(B)(3)	See A.I.2.c below.
	OAC rule 3745-17-11(B)	See A.I.2.d below.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

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

At a minimum, the permittee's employment of RACM shall include: localized hooding at each torch cutting machine to capture swarf and process emissions, and venting these emissions to the settling chamber (SCH01) as the primary collector and then to the baghouse (BGH04).

The collection efficiency shall be 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, and the control equipment shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions from the exhaust stack(s), whichever is less stringent.

2. Additional Terms and Conditions (continued)

- 2.d The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the RACM requirements specified in OAC rule 3745-17-08.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 3 to 12 inches of water, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 6 months after permit issuance.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCDH, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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.
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 any non-stack egress point (e.g. windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit, and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The deviation reports shall be submitted 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.2 of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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.b Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

0.030 grain of particulate emissions per dry standard cubic foot of exhaust or no visible particulate emissions

Applicable Compliance Method:

If required, compliance shall be determined through emission tests performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(7) or the requirements established in 40 CFR Part 60, Appendix A, Method 22, as appropriate.

1.d Emission Limitation:

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

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of the cutting torch fuel. The process materials (specialty ingots) employed in this emissions unit do not generate sulfur dioxide emissions during the cutting process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the cutting torch fuel.

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 within 6 months after issuance of the permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emissions limitations.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable emission limitation(s):
 - i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and
 - ii. for the mass emission rate for particulates, Method 5 of 40 CFR Part 60, Appendix A.
 - d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.
 - e. The following parameter shall also be monitored and recorded during the emissions testing: the pressure drop across the baghouse.

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

Personnel from the CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD 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 CCHD, APCD.

VI. Miscellaneous Requirements

1. Within 30 days after issuance of this permit, the permittee shall submit a complete permit to install application for this emissions unit. The application shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

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: AOD Vessel #3 Melt Shop (P064)
Activity Description: 100 Ton Salem Corp. Argon/Oxygen Decarburization Vessel

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>
argon/oxygen decarburization (AOD) vessel in #3 melt shop, with a 153.2 tons/hr process weight rate, controlled by the #3 melt shop baghouse (BGH02)	OAC rule 3745-31-05 (PTI 15-009)	0.0052 grain of particulate emissions per dry standard cubic foot of exhaust gases See A.I.2.e below.
	OAC rule 3745-17-07(A)(1)	BAT was also determined to be compliance with all applicable rules. See A.I.2.a below.
	OAC rule 3745-17-07(B)(3)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11	See A.I.2.d below.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

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 6-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.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 use of localized hooding over the AOD vessel.

The collection efficiency shall be 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 OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the RACM requirements specified in OAC rule 3745-31-05.

2. Additional Terms and Conditions (continued)

- 2.e Emissions units F003, P064, P068, P902, P903, and Z027 shall be vented to the #3 melt shop baghouse. The total allowable outlet emission rate from this baghouse shall not exceed 0.0052 gr/dscf.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 2 to 9 inches of water, while the emissions units identified in A.I.2.e are in operation, until a pressure drop range that is more representative of actual operating conditions can be established during the emission testing required in section A.V.2. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 1 month after completion of the emission tests.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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 units identified in A.I.2.e are 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 units are in operation.
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 any non-stack egress point (e.g., windows, doors, roof monitors, etc.) associated with this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above, 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 particulate emissions were observed from the non-stack egress point (e.g., windows, doors, roof monitors, etc.) associated with this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The deviation reports shall be submitted 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. of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emissions 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.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

0.0052 grain of particulate emissions per dry standard cubic foot of exhaust gases

Applicable Compliance Method:

Compliance shall be determined through emission tests performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5.

1.d 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 due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months after issuance of this permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate matter and the visible particulate emission limitations.
 - c. The following parameter also shall be monitored and recorded during the emissions testing: the pressure drop across the baghouse.
 - d. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:
 - i. for the visible particulate emission limitations, Method 9 of 40 CFR Part 60, Appendix A; and
 - ii. for the mass emission rate for particulate matter, Method 5 of 40 CFR Part 60, Appendix A.
 - e. The tests shall be conducted while the emissions units identified in A.I.2.e are operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

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

Personnel from the CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD 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 CCHD, APCD.

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: #3 & #4 Melt Shops Lime and Alloy Transfer (P068)
Activity Description: Lime and alloy transfer and conveying system

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>
#3 and #4 melt shops lime and alloy transfer, belt transfer and conveying system with a maximum process weight rate of 125 tons/hour as follows:		
belt conveyor from truck hopper to chute with hood at drop point, chute to belt conveyor, belt conveyor to two-way chute with hood at drop point, two-way chute to belt conveyor with hood at drop point, belt conveyor to #4 melt shop trip car - all hoods are vented to the crossover conveyor baghouse (BGH21)	OAC rule 3745-17-07(A) OAC rule 3745-17-07(B)(3) OAC rule 3745-17-08(B) OAC rule 3745-17-11(B) (Figure II)	See A.I.2.a below. See A.I.2.b below. See A.I.2.c below. 10 lbs/hr of particulate emissions See A.I.2.e below.
two-way chute to shuttle conveyor with hood at drop point, shuttle conveyor to #3 melt shop chrome & lime bins with hood at drop point, chrome and lime bins to belt conveyor with hoods at drop points, belt conveyor to #3 melt shop initial charge car with hoods at drop point - all hoods vented to the #3 melt shop lime/alloy baghouse (BGH23)	OAC rule 3745-17-07(A) OAC rule 3745-17-07(B)(3) OAC rule 3745-17-08(B)(3)	See A.I.2.a below. See A.I.2.b below. 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions from the exhaust stack, whichever is less stringent See A.I.2.c below.
#3 melt shop initial charge car to the #3 melt shop controlled by the #3 melt shop baghouse (BGH02) via canopy hoods	OAC rule 3745-17-07(A) OAC rule 3745-17-07(B)(3) OAC rule 3745-17-08(B)	See A.I.2.a below. See A.I.2.b below. 0.0052 grain of particulate emissions per dry standard cubic foot of exhaust gases See A.I.2.c below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
belt conveyor to #4 melt shop trip car, #4 melt shop trip car to the #4 melt shop lime/alloy bins, lime/alloy bins to the alloy weigh car with chute, alloy weigh car to the #4 initial charge car controlled by the #4 melt shop baghouse (BGH01) via building evacuation	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(3)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11 (Figure II)	10 lbs/hr of particulate emissions
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.e below. Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

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

At a minimum, the permittee's employment of RACM shall consist of the following:

- i. localized hooding above the chute at the end of the belt conveyor coming from the truck hopper;
- ii. localized hooding above the two-way chute at the end of the belt conveyor coming from the chute denoted above;
- iii. localized hooding at the bottom of the two-way chute over the belt conveyor leading to the #4 melt shop trip car;
- iv. building evacuation for the #4 melt shop trip car;
- v. building evacuation vented to the #3 melt shop baghouse (BGH02) and the #4 melt shop baghouse (BGH01) for the initial charge car going to the #3 and #4 melt shops;
- vi. localized hooding at the bottom of the two-way chute over the shuttle conveyor leading to the #3 melt shop chrome and lime bins, and vented to the #3 melt shop lime/alloy baghouse (BGH23);
- vii. localized hooding at the bottom of the #3 melt shop chrome and lime bins over the belt conveyor leading to the #3 melt shop initial charge car, and vented to BGH23; and
- viii. localized hooding over the #3 melt shop initial charge car, and vented to BGH23.

For the fugitive emissions captured and vented to the #3 melt shop baghouse (BGH02) the baghouse shall achieve an outlet emission rate of 0.0052 gr/dscf, and for fugitive emissions captured and vented to #3 melt shop lime/alloy baghouse (BGH23) the baghouse shall achieve an outlet emission rate of 0.030 gr/dscf (or no visible emissions from the exhaust stack, whichever is less stringent).

In each case mentioned above where localized hooding is used, the collection efficiency shall be 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. Additional Terms and Conditions (continued)

- 2.d** The particulate emission rate for the #4 melt shop baghouse (BGH01) and the crossover conveyor baghouse (BGH21) is regulated under OAC rule 3745-17-11, since these baghouses were installed prior to 1972. The permittee shall comply with the more restrictive requirement of either Table 1 or Figure II. Based on calculations using an AP-42 emission factor from section 13.2.4, Figure II does not apply because the uncontrolled mass rate of emissions (UMRE) was determined to be less than 10 lbs/hr. Since the limit from Table 1, based on process weight rate, is greater than 10 lbs/hr, the allowable limit of 10 lbs/hr of particulate matter was established to ensure that Figure II will not become applicable to this emissions unit.
- 2.e** Emissions units F003, P064, P068, P902, P903, and Z027 shall be vented to the #3 melt shop baghouse (BGH02). The total allowable outlet emission rate from this baghouse shall not exceed 0.0052 gr/dscf.

II. Operational Restrictions

1. The pressure drop across the baghouses shall be maintained within the manufacturer's recommended ranges of 4 to 8 inches of water for BGH01 and 2 to 9 inches of water for BGH02, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 6 months after issuance of this permit.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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 baghouses BGH01 and BGH02 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 in operation.

Baghouses BGH21 and BGH23 are located in the rafters of the buildings and are not readily accessible; therefore, the pressure drop monitoring will not be required for these baghouses.

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 any non-stack egress point (e.g. windows, doors, roof monitors, etc.) serving this emissions unit and for any visible particulate emissions from the stacks serving baghouses BGH21 and BGH23. The presence or absence of any visible fugitive or stack particulate emissions shall be noted in an operations log. If visible fugitive and/or stack particulate emissions are observed, the permittee shall also note the following in the operations log:
- the color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible fugitive and/or stack particulate emission incident; and
 - any corrective actions taken to eliminate the visible fugitive and/or stack particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that:
- identify all days during which any visible fugitive and/or stack particulate emissions were observed from any non-stack egress point serving this emissions unit and/or from the stacks serving baghouses BGH21 or BGH23; and
 - describe any corrective actions taken to eliminate the visible fugitive and/or stack 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.

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly pressure drop deviation (excursion) reports for baghouses BGH01 and BGH02 that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above, as well as the corrective actions that were taken to achieve compliance.
3. The deviation reports shall be submitted 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. of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average (stack emissions)

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). This limitation applies to the stack emissions from all four baghouses (BGH01, BGH02, BGH21, and BGH23).

1.b Emission Limitation:

20% opacity as a 6-minute average (fugitive emissions)

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

0.0052 grain of particulate emissions per dry standard cubic foot of exhaust gases

Applicable Compliance Method:

This limitation applies to stack emissions from the #3 melt shop baghouse (BGH02). If required by the Canton City Health Department, Air Pollution Control Division, compliance shall be demonstrated using Test Methods 1 through 5 in 40 CFR, Part 60, Appendix A; otherwise, compliance shall be demonstrated by the absence of any visible emissions from the baghouses serving this emissions unit and using Test Method 22 in 40 CFR, Part 60, Appendix A.

1.d Emission Limitation:

0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions from the exhaust stack, whichever is less stringent

Applicable Compliance Method:

This limitation applies to the #3 melt shop lime/alloy baghouse (BGH23). If required by the Canton City Health Department, Air Pollution Control Division, compliance shall be demonstrated using Test Methods 1 through 5 in 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(7); otherwise, compliance shall be demonstrated by the absence of any visible emissions from the baghouses serving this emissions unit and using Test Method 22 in 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

1.e Emission Limitation:

10 lbs/hr of particulate emissions

Applicable Compliance Method:

This condition applies to the stack emissions from the #4 melt shop baghouse (BGH01) and the crossover conveyor baghouse (BGH21). If required by the Canton City Health Department, Air Pollution Control Division, compliance shall be demonstrated using Test Methods 1 through 5 in 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10); otherwise, compliance shall be demonstrated by the absence of any visible emissions from the baghouses serving this emissions unit and using Test Method 22 in 40 CFR, Part 60, Appendix A.

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 due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

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 from the outlets of baghouses BGH01, BGH02, BGH21, and BGH23, and the visible particulate emission limitations.

b. The following parameters shall also be monitored and recorded during the emission testing: the pressure drop across the baghouses.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and

ii. for the mass emission rate for particulates, Method 5 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while the emissions units identified in A.I.2.e are operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

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

Personnel from the CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD 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 CCHD, APCD.

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: #4 Grinder at #5 Steel Conditioning (P070)
Activity Description: Steel billet grinder

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#4 grinder at #5 steel conditioning controlled by a settling chamber (SCHO3) and a baghouse (BGH10) and vented inside the building	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11(B)	31.8 lbs/hr of particulate emissions
	OAC rule 3745-31-05(A)(3) (PTI 15-054)	See A.I.2.d below. See A.I.2.e below.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

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. 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.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 minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

2. Additional Terms and Conditions (continued)

- 2.d** Emissions units P070, P071, P074, P076, and P078 are similar emissions units; therefore, the total uncontrolled mass rate of emissions from all units shall be used to determine the allowable emission limit from OAC rule 3745-17-11, Figure II. From a 12/17/87 stack test for one unit, the UMRE was determined to be 99.26 lbs/hr of particulate emissions. The total UMRE is therefore 496.3 lbs/hr of particulate emissions. Using Curve P-1 from Figure II, the total allowable emission rate was determined to be 31.8 lbs/hr for all 5 grinding operations combined.
- 2.e** In accordance with PTI 15-054, BAT was determined to be compliance with all applicable rules.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 3 to 8 inches of water, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 6 months after permit issuance.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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.
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 any non-stack egress point (e.g. windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The deviation reports shall be submitted 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:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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.b Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

31.8 lbs/hr of particulate emissions - combined total for emissions units P070, P071, P074, P076, and P078

Applicable Compliance Method:

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

1.d 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 due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

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 visible particulate emission limitations.
 - b. The following parameters shall also be monitored and recorded during the emissions testing: the pressure drop across the baghouse.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:
 - i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and
 - ii. for the hourly mass emission rate for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A.
 - d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

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

Personnel from the CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD 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 CCHD, APCD.

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: #5 Grinder at #5 Steel Conditioning (P071)
Activity Description: Steel billet grinder

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#5 grinder at #5 steel conditioning controlled by a settling chamber (SCHO4) and a baghouse (BGH11) and vented inside the building	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11(B)	31.8 lbs/hr of particulate emissions
	OAC rule 3745-31-05(A)(3) (PTI 15-055)	See A.I.2.d below. See A.I.2.e below.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

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. 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.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 minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

2. Additional Terms and Conditions (continued)

- 2.d** Emissions units P070, P071, P074, P076, and P078 are similar emissions units; therefore, the total uncontrolled mass rate of emissions from all units shall be used to determine the allowable emission limit from OAC rule 3745-17-11, Figure II. From a 12/17/87 stack test for one unit, the UMRE was determined to be 99.26 lbs/hr of particulate emissions. The total UMRE is therefore 496.3 lbs/hr of particulate emissions. Using Curve P-1 from Figure II, the total allowable emission rate was determined to be 31.8 lbs/hr for all 5 grinding operations combined.
- 2.e** In accordance with PTI 15-055, BAT was determined to be compliance with all applicable rules.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 3 to 8 inches of water, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 6 months after permit issuance.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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.
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 any non-stack egress point (e.g. windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The deviation reports shall be submitted 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:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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.b Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

31.8 lbs/hr of particulate emissions - combined total for emissions units P070, P071, P074, P076, and P078

Applicable Compliance Method:

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

1.d 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 due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

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 visible particulate emission limitations.
 - b. The following parameters shall also be monitored and recorded during the emissions testing: the pressure drop across the baghouse.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:
 - i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and
 - ii. for the hourly mass emission rate for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A.
 - d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

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

Personnel from the CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD 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 CCHD, APCD.

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: #10 Grinder at #5 Steel Conditioning (P074)
Activity Description: Steel billet grinder

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#10 grinder at #5 steel conditioning controlled by a settling chamber (SCHO7) and a baghouse (BGH14) and vented outside the building due to the processing of leaded steel	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11(B)	31.8 lbs/hr of particulate emissions
		See A.I.2.d below.
	OAC rule 3745-31-05(A)(3) (PTI 15-055)	See A.I.2.e below.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

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. 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.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 minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

2. Additional Terms and Conditions (continued)

- 2.d** Emissions units P070, P071, P074, P076, and P078 are similar emissions units; therefore, the total uncontrolled mass rate of emissions from all units shall be used to determine the allowable emission limit from OAC rule 3745-17-11, Figure II. From a 12/17/87 stack test for one unit, the UMRE was determined to be 99.26 lbs/hr of particulate emissions. The total UMRE is therefore 496.3 lbs/hr of particulate emissions. Using Curve P-1 from Figure II, the total allowable emission rate was determined to be 31.8 lbs/hr for all 5 grinding operations combined.
- 2.e** In accordance with PTI 15-055, BAT was determined to be compliance with all applicable rules.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 3 to 8 inches of water, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 6 months after permit issuance.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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.
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 any non-stack egress point (e.g. windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The deviation reports shall be submitted 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:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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.b Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

31.8 lbs/hr of particulate emissions - combined total for emissions units P070, P071, P074, P076, and P078

Applicable Compliance Method:

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

1.d 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 due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

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 visible particulate emission limitations.
 - b. The following parameters shall also be monitored and recorded during the emissions testing: the pressure drop across the baghouse.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:
 - i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and
 - ii. for the hourly mass emission rate for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A.
 - d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

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

Personnel from the CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD 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 CCHD, APCD.

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: #12 Grinder at #5 Steel Conditioning (P076)
Activity Description: Steel billet grinder

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#12 grinder at #5 steel conditioning controlled by a settling chamber (SCHO9) and a baghouse (BGH16) and vented outside the building	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11(B)	31.8 lbs/hr of particulate emissions
	OAC rule 3745-31-05(A)(3) (PTI 15-055)	See A.I.2.d below. See A.I.2.e below.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

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. 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.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 minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

2. Additional Terms and Conditions (continued)

- 2.d** Emissions units P070, P071, P074, P076, and P078 are similar emissions units; therefore, the total uncontrolled mass rate of emissions from all units shall be used to determine the allowable emission limit from OAC rule 3745-17-11, Figure II. From a 12/17/87 stack test for one unit, the UMRE was determined to be 99.26 lbs/hr of particulate emissions. The total UMRE is therefore 496.3 lbs/hr of particulate emissions. Using Curve P-1 from Figure II, the total allowable emission rate was determined to be 31.8 lbs/hr for all 5 grinding operations combined.
- 2.e** In accordance with PTI 15-055, BAT was determined to be compliance with all applicable rules.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 3 to 8 inches of water, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 6 months after permit issuance.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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.
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 any non-stack egress point (e.g. windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The deviation reports shall be submitted 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:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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.b Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

31.8 lbs/hr of particulate emissions - combined total for emissions units P070, P071, P074, P076, and P078

Applicable Compliance Method:

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

1.d 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 due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

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 visible particulate emission limitations.
 - b. The following parameters shall also be monitored and recorded during the emissions testing: the pressure drop across the baghouse.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:
 - i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and
 - ii. for the hourly mass emission rate for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A.
 - d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

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

Personnel from the CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD 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 CCHD, APCD.

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: #14 Grinder at #5 Steel Conditioning (P078)
Activity Description: Steel billet grinder

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#14 grinder at #5 steel conditioning controlled by a settling chamber (SCH11) and a baghouse (BGH18) and vented inside the building	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11(B)	31.8 lbs/hr of particulate emissions
	OAC rule 3745-31-05(A)(3) (PTI 15-055)	See A.I.2.d below. See A.I.2.e below.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

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. 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.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 minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

2. Additional Terms and Conditions (continued)

- 2.d** Emissions units P070, P071, P074, P076, and P078 are similar emissions units; therefore, the total uncontrolled mass rate of emissions from all units shall be used to determine the allowable emission limit from OAC rule 3745-17-11, Figure II. From a 12/17/87 stack test for one unit, the UMRE was determined to be 99.26 lbs/hr of particulate emissions. The total UMRE is therefore 496.3 lbs/hr of particulate emissions. Using Curve P-1 from Figure II, the total allowable emission rate was determined to be 31.8 lbs/hr for all 5 grinding operations combined.
- 2.e** In accordance with PTI 15-055, BAT was determined to be compliance with all applicable rules.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 3 to 8 inches of water, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 6 months after permit issuance.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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.
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 any non-stack egress point (e.g. windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The deviation reports shall be submitted 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:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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.b Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.
 - 1.c Emission Limitation:

31.8 lbs/hr of particulate emissions - combined total for emissions units P070, P071, P074, P076, and P078

Applicable Compliance Method:

If required, compliance shall be determined through emission tests performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).
 - 1.d 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 due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

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 visible particulate emission limitations.
 - b. The following parameters shall also be monitored and recorded during the emissions testing: the pressure drop across the baghouse.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:
 - i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and
 - ii. for the hourly mass emission rate for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A.
 - d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

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

Personnel from the CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD 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 CCHD, APCD.

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 Round Grinder at #4 Steel Conditioning (P081)
Activity Description: Steel Grinder

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#1 round grinder at #4 steel conditioning with a maximum process weight rate of 35 tons/hr, controlled by the #4 steel conditioning/#1 round grinder settling chamber (SCH12) and the #4 steel conditioning/#1 round grinder baghouse (BGH05)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11(B) (Figure II)	11.2 lbs/hr of particulate emissions
	OAC rule 3745-31-05(A)(3) (PTI 15-073)	See A.I.2.d below.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

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. 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.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 minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

2. Additional Terms and Conditions (continued)

2.d In accordance with PTI 15-073, BAT was determined to be compliance with all applicable rules.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 1 to 11 inches of water, 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 (CCHD, APCD) within 6 months of permit issuance.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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 in operation.
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 any non-stack egress point (e.g., windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above, as well as the corrective actions that were taken to achieve compliance.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
3. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

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. of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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.b Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

11.2 lbs/hr of particulate emissions

Applicable Compliance Method:

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

1.d 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 due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

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 visible particulate emission limitations.

b. The following parameters shall also be monitored and recorded during the emission testing: the pressure drop across the baghouse.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and

ii. for the hourly mass emission rate for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

V. Testing Requirements (continued)

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

Personnel from the CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD 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 CCHD, APCD.

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: #2 Slab Grinder at #4 Steel Conditioning (P082)
Activity Description: Steel Slab Grinder

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#2 slab grinder at #4 steel conditioning with a maximum process weight rate of 16 tons/hr, controlled by the #4 steel conditioning/#2 slab grinder settling chamber (SCH13) and the #4 steel conditioning/#2 slab grinder baghouse (BGH06)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11(B) (Figure II)	11.2 lbs/hr of particulate emissions
	OAC rule 3745-31-05(A)(3) (PTI 15-073)	See A.I.2.d below.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

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. 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.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 minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

2. Additional Terms and Conditions (continued)

2.d In accordance with PTI 15-073, BAT was determined to be compliance with all applicable rules.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 1 to 11 inches of water, 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 (CCHD, APCD) within 6 months of permit issuance.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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 in operation.
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 any non-stack egress point (e.g., windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above, as well as the corrective actions that were taken to achieve compliance.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
3. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

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. of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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.b Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

11.2 lbs/hr of particulate emissions

Applicable Compliance Method:

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

1.d 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 due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

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 visible particulate emission limitations.

b. The following parameters shall also be monitored and recorded during the emission testing: the pressure drop across the baghouse.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and

ii. for the hourly mass emission rate for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

V. Testing Requirements (continued)

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

Personnel from the CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD 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 CCHD, APCD.

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: #3 Slab Grinder at #4 Steel Conditioning (P083)
Activity Description: Steel Slab Grinder

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#3 slab grinder at #4 steel conditioning with a maximum process weight rate of 16 tons/hr, controlled by the #4 steel conditioning/#3 slab grinder settling chamber (SCH14) and the #4 steel conditioning/#3 slab grinder baghouse (BGH07)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11(B) (Figure II)	11.2 lbs/hr of particulate emissions
	OAC rule 3745-31-05(A)(3) (PTI 15-073)	See A.I.2.d below.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

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. 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.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 minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

2. Additional Terms and Conditions (continued)

2.d In accordance with PTI 15-073, BAT was determined to be compliance with all applicable rules.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 1 to 11 inches of water, 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 (CCHD, APCD) within 6 months of permit issuance.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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 in operation.
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 any non-stack egress point (e.g., windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above, as well as the corrective actions that were taken to achieve compliance.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
3. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

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. of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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.b Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

11.2 lbs/hr of particulate emissions

Applicable Compliance Method:

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

1.d 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 due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

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 visible particulate emission limitations.

b. The following parameters shall also be monitored and recorded during the emission testing: the pressure drop across the baghouse.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and

ii. for the hourly mass emission rate for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

V. Testing Requirements (continued)

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

Personnel from the CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD 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 CCHD, APCD.

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: Car Type Box Anneal/Temp #3 (P094)
Activity Description: Steel annealing/tempering furnace

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>
car type box annealing/tempering furnace #3, 15 mmBtu/hr, fired with natural gas	OAC rule 3745-17-07(B)(1)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.c below.

2. Additional Terms and Conditions

- Visible particulate emissions of fugitive dust shall not exceed 20% opacity 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.
- The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

 No controls are necessary for this emissions unit to satisfy the RACM requirements specified in OAC rule 3745-17-08(B), because the process materials (steel coils, bars, and billets) employed in this emissions unit do not generate particulate emissions during the charging of the furnace or during the heating process.
- Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

- 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

- The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
- The permittee shall submit the required deviation (excursion) reports in accordance with 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. of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). 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.

- 1.b Emission Limitation:

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

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials (steel coils, bars, and billets) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

VI. Miscellaneous Requirements

None

B. State 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>
car type box annealing/tempering furnace #3, 15 mmBtu/hr, fired with natural gas	OACule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 26.2 lbs/hr.

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

- Emission Limitation:

Sulfur dioxide emissions shall not exceed 26.2 lbs/hr.

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials (steel coils, bars, and billets) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Car Type Box Anneal/Temp #4 (P095)
Activity Description: Steel annealing/tempering furnace

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>
car type box annealing/tempering furnace #4, 15 mmBtu/hr, fired with natural gas	OAC rule 3745-17-07(B)(1)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.c below.

2. Additional Terms and Conditions

- Visible particulate emissions of fugitive dust shall not exceed 20% opacity 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.
- The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

 No controls are necessary for this emissions unit to satisfy the RACM requirements specified in OAC rule 3745-17-08(B), because the process materials (steel coils, bars, and billets) employed in this emissions unit do not generate particulate emissions during the charging of the furnace or during the heating process.
- Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

- 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

- The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
- The permittee shall submit the required deviation (excursion) reports in accordance with 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. of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). 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.

- 1.b Emission Limitation:

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

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials (steel coils, bars, and billets) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

VI. Miscellaneous Requirements

None

B. State 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>
car type box annealing/tempering furnace #4, 15 mmBtu/hr, fired with natural gas	OACule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 26.2 lbs/hr.

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

- Emission Limitation:

Sulfur dioxide emissions shall not exceed 26.2 lbs/hr.

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials (steel coils, bars, and billets) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Car Type Box Anneal/Temp #5 (P096)
Activity Description: Steel annealing/tempering furnace

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>
car type box annealing/tempering furnace #5, 15 mmBtu/hr, fired with natural gas	OAC rule 3745-17-07(B)(1)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.c below.

2. Additional Terms and Conditions

- Visible particulate emissions of fugitive dust shall not exceed 20% opacity 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.
- The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

 No controls are necessary for this emissions unit to satisfy the RACM requirements specified in OAC rule 3745-17-08(B), because the process materials (steel coils, bars, and billets) employed in this emissions unit do not generate particulate emissions during the charging of the furnace or during the heating process.
- Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

- 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

- The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
- The permittee shall submit the required deviation (excursion) reports in accordance with 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. of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). 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.

- 1.b Emission Limitation:

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

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials (steel coils, bars, and billets) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

VI. Miscellaneous Requirements

None

B. State 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>
car type box annealing/tempering furnace #5, 15 mmBtu/hr, fired with natural gas	OACule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 26.2 lbs/hr.

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

- Emission Limitation:

Sulfur dioxide emissions shall not exceed 26.2 lbs/hr.

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials (steel coils, bars, and billets) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Car Type Box Anneal/Temp #8 (P099)
Activity Description: Steel annealing/tempering furnace

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>
car type box annealing/tempering furnace #8, 15 mmBtu/hr, fired with natural gas	OAC rule 3745-17-07(B)(1)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.c below.

2. Additional Terms and Conditions

- Visible particulate emissions of fugitive dust shall not exceed 20% opacity 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.
- The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

 No controls are necessary for this emissions unit to satisfy the RACM requirements specified in OAC rule 3745-17-08(B), because the process materials (steel coils, bars, and billets) employed in this emissions unit do not generate particulate emissions during the charging of the furnace or during the heating process.
- Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

- 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

- The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
- The permittee shall submit the required deviation (excursion) reports in accordance with 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. of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). 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.

- 1.b Emission Limitation:

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

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials (steel coils, bars, and billets) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

VI. Miscellaneous Requirements

None

B. State 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>
car type box annealing/tempering furnace #8, 15 mmBtu/hr, fired with natural gas	OACule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 26.2 lbs/hr.

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

- Emission Limitation:

Sulfur dioxide emissions shall not exceed 26.2 lbs/hr.

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials (steel coils, bars, and billets) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Car Type Box Anneal/Temp #10 (P101)
Activity Description: Steel annealing/tempering furnace

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>
car type box annealing/tempering furnace #10, 15 mmBtu/hr, fired with natural gas	OAC rule 3745-17-07(B)(1)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.c below.

2. Additional Terms and Conditions

- Visible particulate emissions of fugitive dust shall not exceed 20% opacity 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.
- The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

 No controls are necessary for this emissions unit to satisfy the RACM requirements specified in OAC rule 3745-17-08(B), because the process materials (steel coils, bars, and billets) employed in this emissions unit do not generate particulate emissions during the charging of the furnace or during the heating process.
- Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

- 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

- The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
- The permittee shall submit the required deviation (excursion) reports in accordance with 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. of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). 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.

- 1.b Emission Limitation:

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

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials (steel coils, bars, and billets) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

VI. Miscellaneous Requirements

None

B. State 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>
car type box annealing/tempering furnace #10, 15 mmBtu/hr, fired with natural gas	OACule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 26.2 lbs/hr.

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

- Emission Limitation:

Sulfur dioxide emissions shall not exceed 26.2 lbs/hr.

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials (steel coils, bars, and billets) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Car Type Box Anneal/Temp #16 (P104)
Activity Description: Steel annealing/tempering furnace

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>
car type box annealing/tempering furnace #16, 33 mmBtu/hr, fired with natural gas	OAC rule 3745-17-07(B)(1)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.c below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions of fugitive dust shall not exceed 20% opacity 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.b The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

No controls are necessary for this emissions unit to satisfy the RACM requirements specified in OAC rule 3745-17-08(B), because the process materials (steel coils, bars, and billets) employed in this emissions unit do not generate particulate emissions during the charging of the furnace or during the heating process.
- 2.c Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
2. The permittee shall submit the required deviation (excursion) reports in accordance with 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. of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). 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.

- 1.b Emission Limitation:

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

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials (steel coils, bars, and billets) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

VI. Miscellaneous Requirements

None

B. State 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>
car type box annealing/tempering furnace #16, 33 mmBtu/hr, fired with natural gas	OACule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 54.8 lbs/hr.

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

- Emission Limitation:

Sulfur dioxide emissions shall not exceed 54.8 lbs/hr.

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials (steel coils, bars, and billets) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: LRS #4 Melt Shop (P106)
Activity Description: Ladle Metallurgy/Refining Station in #4 Melt Shop

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 metallurgy/refining station in #4 melt shop controlled by a baghouse (BGH01)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-11(B)	See A.I.2.c below.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.
	OAC rule 3745-31-05(A)(3) (PTI 15-234)	0.005 grain of particulate emissions per dry standard cubic foot of exhaust gases
		See A.I.2.b below.

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 The particulate emissions from this emissions unit shall be controlled by direct evacuation and canopy hoods vented to the baghouse serving the #4 melt shop. This limitation is in accordance with the federally enforceable Permit to Install 15-234 which was issued final on July 31, 1984.
- 2.c The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 4 to 8 inches of water, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 6 months after permit issuance.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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 in operation.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above, as well as the corrective actions that were taken to achieve compliance.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
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 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:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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.b 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 due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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:

0.005 grain of particulate emissions per dry standard cubic foot of exhaust gases

Applicable Compliance Method:

If required, compliance shall be determined through emission tests performed using Method 5 of 40 CFR Part 60, Appendix A.

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 sulfur dioxide and particulate matter, and the visible emission limitation.
 - b. The following parameters shall also be monitored and recorded during the emission testing: the process weight rate (in tons); and the pressure drop across the baghouse.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:
 - i. for the visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A;
 - ii. for the emission rate for SO₂, Method 6 of 40 CFR Part 60, Appendix A; and
 - iii. for the grain loading mass emission rate for particulate emissions, Method 5 of 40 CFR Part 60, Appendix A.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the CCHD, APCD.

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

Personnel from the appropriate CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s).

NOTE: The testing shall be performed on an "if required" basis due to the fact that this emissions unit is operated as a backup unit to the Ladle Metallurgical Facility (LMF). Typically, this unit will be operated for one heat every other month, if needed, to perform maintenance on the LMF. A stack test was performed on the LMF in 1999 which verified compliance with the PM, PM₁₀, and SO₂ emission limitations. If this emissions unit (P106) begins to operate on a full-time basis, regular periodic stack testing will be required.

VI. Miscellaneous Requirements

None

B. State 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>
ladle metallurgy/refining station in #4 melt shop controlled by a baghouse (BGH01)	OAC rule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 1,099 lbs/hr.

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

- Emission Limitation:

Sulfur dioxide emissions shall not exceed 1,099 lbs/hr.

Applicable Compliance Method:

Compliance with this limitation will be assumed due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: CRP - Ladle Metallurgical Facility (LMF) (P123)

Activity Description: Ladle Metallurgical Facility

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 metallurgy facility (LMF) controlled with a baghouse (BGHS20)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-11(B)	See A.I.2.a below.
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.a below.

<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) (PTI 15-1314) and OAC rules 3745-31-10 through 3745-31-20	<p>0.005 grain of particulate emissions per dry standard cubic foot of exhaust gases</p> <p>3.12 lbs/hr of particulate emissions (based on 72,800 dry standard cubic feet of exhaust gases per minute)</p> <p>13.67 tpy of particulate emissions</p> <p>2.44 lbs/hr of PM10</p> <p>10.69 tpy of PM10</p> <p>See A.I.2.b below.</p> <p>Visible particulate emissions shall not exceed 5% opacity as a 6-minute average.</p> <p>525 lbs of sulfur dioxide (SO₂) in any 3-hour period based upon a rolling, 3-hour summation of the hourly emissions</p> <p>1,748 lbs of SO₂ in any 24-hour period based upon a rolling, 24-hour summation of the hourly emissions</p> <p>318.94 tons of SO₂ in any 1-year period based upon a rolling, 12-month summation of the hourly emissions</p> <p>See A.II.3, A.II.4 and A.II.5 below for sulfur usage restrictions.</p> <p>See A.I.2.c below.</p>

2. Additional Terms and Conditions

- 2.a** The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to the best available technology determination required pursuant to OAC rule 3745-31-05.
- 2.b** The baghouse serving this emissions unit also serves emissions units P128 and P129. The above particulate emission limitations are for the combined emissions from all 3 of these emissions units (P123, P128, and P129).
- 2.c** The terms and conditions for this emissions unit were established in the federally enforceable PTI 15-1314. The BAT determination for this emissions unit includes compliance with the Prevention of Significant Deterioration (PSD) requirements.

II. Operational Restrictions

1. The LMF shall be equipped with a fabric filter baghouse control system which shall be designed to achieve maximum particulate emission rate of 0.005 grain per dry standard cubic foot of exhaust gases (based on an average flow rate of 72,800 dry standard cubic feet of exhaust gases per minute).
2. The pressure drop across the baghouse shall be maintained within the range of 6 to 15 inches of water while the emissions unit is in operation.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was previously established are no longer applicable.

3. The SO₂ mass emission limitations for this emissions unit and the sulfur addition restrictions are based on an emission factor of 0.80 lb of SO₂ emissions/lb of sulfur added to the steel, as determined by mass balance and based on the assumption that all the excess sulfur is converted to SO₂. Some additional SO₂ is also generated from the sulfur already present in the steel prior to sulfur additions at this emissions unit. This SO₂ emission factor may be adjusted based on emission tests performed for this emissions unit.
4. All sulfur additions in the LMF shall be done by injecting the material under the surface of the molten steel. This may include, but is not limited to, wire injection.
5. Based on the emission factor of 0.8 lb of SO₂/lb of sulfur added, the following sulfur addition rates shall not be exceeded:
 - a. no more than 656 pounds of sulfur additions in any 3-hour period;
 - b. no more than 2,185 pounds of sulfur additions in any 24-hour period; and
 - c. no more than 399 tons of sulfur additions in any rolling, 12-month period.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain hourly records of the following information for this emissions unit:
 - a. hourly records of sulfur additions;
 - b. the rolling, 3-hour rates of sulfur additions; and
 - c. the rolling, 24-hour rates of sulfur additions.
2. The permittee shall maintain monthly records of the total sulfur additions during the calendar month and the rolling, 12-month summation of the sulfur addition figures.
3. The permittee shall 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each rolling, 3-hour period during which the sulfur addition rate in this emissions unit exceeded 656 pounds, and the actual sulfur usage for each such 3-hour period;
 - b. each rolling, 24-hour period during which the sulfur addition rate in this emissions unit exceeded 2,185 pounds, and the actual sulfur usage for each such 24-hour period;
 - c. each rolling, 12-month period during which the sulfur addition rate in this emissions unit exceeded 318.94 tons, and the actual sulfur usage for each such 12-month period; and
 - d. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

IV. Reporting Requirements (continued)

2. The permittee shall also submit annual reports that specify the total particulate, PM10, and SO2 emissions, in tons, from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. The permittee shall submit the required deviation (excursion) reports in accordance with 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 Limitations:

0.005 grain of particulate emissions per dry standard cubic foot of exhaust gases and 3.12 lbs/hr of particulate emissions (combined total for emissions units P123, P128, and P129)

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2 (40 CFR Part 60, Appendix A, Methods 1 through 5).
 - 1.b Emission Limitation:

2.44 lbs/hr of PM10

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2.
 - 1.c Emission Limitation:

5% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.
 - 1.d Emission Limitations:

525 lbs of SO2 in any 3-hour period based upon a rolling, 3-hour summation of the hourly emissions

1,748 lbs of SO2 in any 24-hour period based upon a rolling, 24-hour summation of the hourly emissions

318.94 tons of SO2 in any 1-year period based upon a rolling, 12-month summation of the hourly emissions

Applicable Compliance Method:

Compliance may be demonstrated through the records required pursuant to section A.III.1 and the emission factor specified in section A.II.3.

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2 (40 CFR Part 60, Appendix A, Methods 1 through 4 and 6).

V. Testing Requirements (continued)

1.e Emission Limitations:

13.67 tpy of particulate emissions (combined total for emissions units P123, P128, and P129)
10.69 tpy of PM10

Applicable Compliance Method:

The ton per year emission limitations were developed by multiplying the lbs/hr emission limitations by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitations, compliance will also be shown with the annual emission limitations.

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

a. The emission testing shall be conducted within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and SO₂.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

i. for particulates, Method 5 of 40 CFR Part 60, Appendix A; and

ii. for SO₂, Method 6, of 40 CFR Part 60, Appendix A.

d. The particulate emission tests shall be conducted while emissions units P123, P128 and P129 are operating at or near their maximum capacity unless otherwise specified or approved by the CCHD, APCD. The SO₂ test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the CCHD, APCD.

e. The parametric monitoring requirements established in sections A.III.1 and A.III.5 shall be checked during the emission tests as well as the amount, in pounds, of the sulfur addition.

f. If the test results show that the particulate emission rate exceeded the PM10 emission limitation, then the permittee shall perform a particle size distribution determination, while emissions units P123, P128 and P129 are operating at or near their maximum capacity, to determine the fraction of the PM10 present in the sample which was collected via Method 5. Please note that in addition to the particle size distribution determination, the particulate emissions collected in the impinger section of the Method 5 sampling train must also be evaluated when determining compliance with the PM10 emission limitation.

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

Personnel from the appropriate CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s).

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>
ladle metallurgy facility (LMF) controlled with a baghouse (BGHS20)	OAC rule 3745-18-06(E)(1)	See B.I.2.a below.

2. **Additional Terms and Conditions**

- 2.a The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to the best available technology determination required pursuant to OAC rule 3745-31-05.

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: CRP - Reheat Furnace (P126)
Activity Description: Natural Gas fired reheat furnace and rolling mill

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>
Bloom reheat furnace with a capacity of 196.2 mmBtu/hr; fired with natural gas	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-11(B)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3) (PTI 15-1314) and OAC rules 3745-31-10 through 3745-31-20	Visible particulate emissions shall not exceed 5% opacity as a 6-minute average. 1 lb/hr of particulate emissions 4.4 tpy of particulate emissions 0.12 lb/hr of sulfur dioxide (SO ₂) 0.52 tpy of SO ₂ 0.112 lb of nitrogen oxides (NO _x) per mmBtu of actual heat input 22 lbs/hr of NO _x 96.2 tpy of NO _x 7.8 lbs/hr of carbon monoxide (CO) 34.3 tpy of CO 1.1 lbs/hr of volatile organic compounds (VOC) 4.82 tpy of VOC
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.b below. See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to the best available technology determination required pursuant to OAC rule 3745-31-05.

2. Additional Terms and Conditions (continued)

- 2.b** The terms and conditions of this permit were established in the federally enforceable Permit to Install 15-1314 issued on June 17, 1998. The BAT determination includes compliance with the Prevention of Significant Deterioration requirements.

II. Operational Restrictions

1. The permittee shall only burn natural gas as fuel in this emissions unit.
2. The permittee shall only operate this emissions unit with low NOx burners rated at 0.112 lb of NOx per mmBtu or lower.

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

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

1.a Emission Limitation:

5% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

1.b Emission Limitation:

1 lb/hr of particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the AP-42 particulate emission factor obtained from Section 1.4, Table 1.4-2 (7/98) of 1.9 lbs of particulates/million cubic feet of natural gas by the emissions unit's maximum hourly natural gas firing capacity (converts to 0.4 lb/hr of particulates). If required, compliance shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

1.c Emission Limitation:

0.12 lb/hr of SO₂

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the AP-42 SO₂ emission factor obtained from Section 1.4, Table 1.4-1 (2/98) of 0.6 lb of SO₂ per million cubic feet by the emissions unit's maximum hourly natural gas firing capacity (converts to 0.12 lb/hr of SO₂). If required, compliance shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

V. Testing Requirements (continued)

1.d Emission Limitations:

0.112 lb of NO_x per mmBtu of actual heat input
22 lbs/hr of NO_x

Applicable Compliance Method:

Emission tests conducted on January 19, 1996 showed an average NO_x emission rate of only 2 lbs/hr. If required, compliance shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

1.e Emission Limitation:

7.8 lbs/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated by multiplying an emission factor of 9 lbs of CO per million cubic feet by the emissions unit's maximum hourly natural gas firing capacity (converts to 1.8 lbs/hr of CO). The emission factor was obtained from testing of a 228 mmBtu/hr Bloom reheat furnace at Timken Steel in March of 1999. If required, compliance shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

1.f Emission Limitation:

1.1 lb/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the AP-42 VOC emission factor obtained from Section 1.4, Table 1.4-2 (7/98) of 5.5 lbs of VOC per million cubic feet by the emissions unit's maximum hourly natural gas firing capacity (converts to 1.1 lbs/hr of VOC). If required, compliance shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 or 25A, as appropriate.

1.g Emission Limitations:

96.2 tpy of NO_x
34.3 tpy of CO
4.4 tpy of particulate emissions
4.82 tpy of VOC
0.52 tpy of SO₂

Applicable Compliance Method:

The tpy emission limitations were developed by multiplying the lb(s)/hr emission limitations by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitations, compliance will also be shown with the annual emission limitations.

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>
Bloom reheat furnace with a capacity of 196.2 mmBtu/hr; fired with natural gas	OAC rule 3745-18-06(E)(1)	See B.I.2.a below.

2. Additional Terms and Conditions

- 2.a The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to the best available technology determination required pursuant to OAC rule 3745-31-05.

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: CRP - Alloy Truck Dumping (P128)
Activity Description: Alloy Truck Dumping

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>
cast-roll alloy truck dumping, controlled by the LMF baghouse (BGH20)	OAC rule 3745-31-05(A)(3) (synthetic minor PTI 15-1093)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-17-07(A)	See A.I.2.c below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.d below.
	OAC rule 3745-17-08(B)	See A.I.2.e below.
	OAC rule 3745-17-11(B)	See A.I.2.d below.
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.f below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any fugitive dust source shall not exceed 10% opacity 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.b This emissions unit shall be vented to the LMF (P123) fabric filter baghouse (BGH20). The total allowable emission rate from the exhaust stack of the LMF baghouse is restricted to 0.005 gr/dscf and 13.67 tpy of particulate emissions.
- 2.c Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.d The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to the best available technology requirements specified in OAC rule 3745-31-05.
- 2.e The permittee shall minimize or eliminate visible 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 at the alloy dump station.

The collection efficiency shall be 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.f Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 6 to 15 inches of water while the emissions unit is in operation.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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 in operation.
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 any non-stack egress point (e.g., windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above, as well as the corrective actions that were taken to achieve compliance.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
3. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

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:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

V. Testing Requirements (continued)

1.b Emission Limitation:

10% opacity as a 3-minute average

Applicable Compliance Method:

Compliance shall be determined using USEPA Method 9 from 40 CFR Part 60, Appendix A. 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.

1.c Emission Limitation:

The total allowable emission rate from the exhaust stack of the LMF baghouse is restricted to 0.005 grain of particulate emissions per dry standard cubic foot of exhaust gases (combined for emissions units P123, P128, and P129)

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2 (40 CFR Part 60, Appendix A, Methods 1 through 5).

1.d Emission Limitation:

13.67 tpy of particulate emissions (combined total for emissions units P123, P128, and P129)

Applicable Compliance Method:

The allowable emission limitation of 0.005 gr/dscf converts to an emission rate of 3.12 lbs/hr. The tpy emission limitation was developed by multiplying the lbs/hr emission limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance will also be shown with the annual emission limitation.

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 due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

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

a. The emission testing shall be conducted within 6 months prior to permit expiration.

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

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Method 5 of 40 CFR Part 60, Appendix A.

d. The particulate emission tests shall be conducted while emissions units P123, P128 and P129 are operating at or near their maximum capacity unless otherwise specified or approved by the CCHD, APCD.

e. The following parameter shall also be monitored during the emission tests: pressure drop across the baghouse.

V. Testing Requirements (continued)

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

Personnel from the appropriate CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s).

VI. Miscellaneous Requirements

None

B. State 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>
cast-roll alloy truck dumping, controlled by the LMF baghouse (BGH20)	OAC rule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 508.1 lbs/hr.

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

- Emission Limitation:

Sulfur dioxide emissions shall not exceed 508.1 lbs/hr.

Applicable Compliance Method:

Compliance with this limitation will be assumed due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: CRP - Alloy Conveying and Silos (P129)
Activity Description: Alloy Conveying and Silos

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>
cast-roll alloy conveying and silos, controlled by the LMF baghouse (BGH20)	OAC rule 3745-31-05(A)(3) (synthetic minor PTI 15-1093)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-17-07(A)	See A.I.2.c below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.d below.
	OAC rule 3745-17-08(B)	See A.I.2.e below.
	OAC rule 3745-17-11(B)	See A.I.2.d below.
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.f below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any fugitive dust source shall not exceed 10% opacity 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.b This emissions unit shall be vented to the LMF (P123) fabric filter baghouse (BGH20). The total allowable emission rate from the exhaust stack of the LMF baghouse is restricted to 0.005 gr/dscf and 13.67 tpy of particulate emissions.
- 2.c Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.d The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to the best available technology requirements specified in OAC rule 3745-31-05.
- 2.e The permittee shall minimize or eliminate visible 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 at each transfer point on the conveying system.

The collection efficiency shall be 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.f Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 6 to 15 inches of water while the emissions unit is in operation.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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 in operation.
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 any non-stack egress point (e.g., windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above, as well as the corrective actions that were taken to achieve compliance.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
3. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

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:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

V. Testing Requirements (continued)

1.b Emission Limitation:

10% opacity as a 3-minute average

Applicable Compliance Method:

Compliance shall be determined using USEPA Method 9 from 40 CFR Part 60, Appendix A. 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.

1.c Emission Limitation:

The total allowable emission rate from the exhaust stack of the LMF baghouse is restricted to 0.005 grain of particulate emissions per dry standard cubic foot of exhaust gases (combined for emissions units P123, P128, and P129)

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2 (40 CFR Part 60, Appendix A, Methods 1 through 5).

1.d Emission Limitation:

13.67 tpy of particulate emissions (combined total for emissions units P123, P128, and P129)

Applicable Compliance Method:

The allowable emission limitation of 0.005 gr/dscf converts to an emission rate of 3.12 lbs/hr. The tpy emission limitation was developed by multiplying the lbs/hr emission limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance will also be shown with the annual emission limitation.

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 due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

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

- a. The emission testing shall be conducted within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.
- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Method 5 of 40 CFR Part 60, Appendix A.
- d. The particulate emission tests shall be conducted while emissions units P123, P128 and P129 are operating at or near their maximum capacity unless otherwise specified or approved by the CCHD, APCD.
- e. The following parameter shall also be monitored during the emission tests: pressure drop across the baghouse.

V. Testing Requirements (continued)

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

Personnel from the appropriate CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s).

VI. Miscellaneous Requirements

None

B. State 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>
cast-roll alloy truck dumping, controlled by the LMF baghouse (BGH20)	OAC rule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 508.1 lbs/hr.

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

- Emission Limitation:

Sulfur dioxide emissions shall not exceed 508.1 lbs/hr.

Applicable Compliance Method:

Compliance with this limitation will be assumed due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #4 EAF - #3 Melt Shop (P902)
Activity Description: Electric arc steel making furnace

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>
28.2 tons/hr electric arc furnace #4 controlled by the #3 melt shop baghouse (BGH02)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(3)	See A.I.2.b below.
	OAC rule 3745-17-08(B)(3)	0.0052 grain of particulate emissions per dry standard cubic foot (gr/dscf) of exhaust gases
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.c and A.I.2.d below. Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

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 6-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 enclosing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.
- 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 following:

- i. capture of fugitive particulate emissions using canopy hoods; and
- ii. control of fugitive particulate emissions using a baghouse with an outlet emission rate of not greater than 0.0052 gr/dscf.

The collection efficiency shall be 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. Additional Terms and Conditions (continued)

- 2.d** Emissions units F003, P064, P068, P902, P903, and Z027 shall be vented to the #3 melt shop baghouse. The total allowable outlet emission rate from this baghouse, in accordance with the RACM determination, shall not exceed 0.0052 gr/dscf.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 2 to 9 inches of water, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established during the emission testing required in section A.V.2. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 1 month after completion of the emissions testing.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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 in operation.
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 any non-stack egress point (e.g., windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1, as well as the corrective actions that were taken to achieve compliance.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
3. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

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:

20% opacity as a 6-minute average (stack)

Applicable Compliance Method:

Compliance shall be determined through visible emissions 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.b Emission Limitation:

20% opacity as a 6-minute average (fugitive)

Applicable Compliance Method:

Compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building enclosing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c 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 due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.d Emission Limitation:

0.0052 gr/dscf of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2 (40 CFR Part 60, Appendix A, Methods 1 through 5).

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months after issuance of the permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitations.
 - c. The following parameters shall also be monitored and recorded during the emissions testing: the process weight rate (in tons); and the pressure drop across the baghouse.
 - d. The following test method(s) shall be employed to demonstrate compliance with the allowable emission limitation(s):
 - i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and
 - ii. for the grain loading emission rate for particulate emissions, Method 5 of 40 CFR Part 60, Appendix A.
 - e. The tests shall be conducted while the emissions units identified in A.I.2.d are operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

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

Personnel from the appropriate CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s).

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>
28.2 tons/hr electric arc furnace #4 controlled by the #3 melt shop baghouse (BGH02)	OAC rule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 187.4 lbs/hr.

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

1. Emission Limitation:

Sulfur dioxide emissions shall not exceed 187.4 lbs/hr.

Applicable Compliance Method:

Compliance with this limitation will be assumed due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #5 EAF - #3 Melt Shop (P903)
Activity Description: Electric arc steel making furnace

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>
28.2 tons/hr electric arc furnace #5 controlled by the #3 melt shop baghouse (BGH02)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(3)	See A.I.2.b below.
	OAC rule 3745-17-08(B)(3)	0.0052 grain of particulate emissions per dry standard cubic foot (gr/dscf) of exhaust gases
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.c and A.I.2.d below. Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

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 6-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 enclosing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.
- 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 following:

- i. capture of fugitive particulate emissions using canopy hoods; and
- ii. control of fugitive particulate emissions using a baghouse with an outlet emission rate of not greater than 0.0052 gr/dscf.

The collection efficiency shall be 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. Additional Terms and Conditions (continued)

- 2.d** Emissions units F003, P064, P068, P902, P903, and Z027 shall be vented to the #3 melt shop baghouse. The total allowable outlet emission rate from this baghouse, in accordance with the RACM determination, shall not exceed 0.0052 gr/dscf.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 2 to 9 inches of water, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established during the emission testing required in section A.V.2. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 1 month after completion of the emissions testing.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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 in operation.
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 any non-stack egress point (e.g., windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1, as well as the corrective actions that were taken to achieve compliance.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
3. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

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:

20% opacity as a 6-minute average (stack)

Applicable Compliance Method:

Compliance shall be determined through visible emissions 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.b Emission Limitation:

20% opacity as a 6-minute average (fugitive)

Applicable Compliance Method:

Compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building enclosing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c 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 due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.d Emission Limitation:

0.0052 gr/dscf of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2 (40 CFR Part 60, Appendix A, Methods 1 through 5).

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months after issuance of the permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitations.
 - c. The following parameters shall also be monitored and recorded during the emissions testing: the process weight rate (in tons); and the pressure drop across the baghouse.
 - d. The following test method(s) shall be employed to demonstrate compliance with the allowable emission limitation(s):
 - i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and
 - ii. for the grain loading emission rate for particulate emissions, Method 5 of 40 CFR Part 60, Appendix A.
 - e. The tests shall be conducted while the emissions units identified in A.I.2.d are operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

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

Personnel from the appropriate CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s).

VI. Miscellaneous Requirements

None

B. State 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>
28.2 tons/hr electric arc furnace #5 controlled by the #3 melt shop baghouse (BGH02)	OAC rule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 187.4 lbs/hr.

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

- Emission Limitation:

Sulfur dioxide emissions shall not exceed 187.4 lbs/hr.

Applicable Compliance Method:

Compliance with this limitation will be assumed due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #7 EAF - #4 Melt Shop (P905)
Activity Description: Electric arc steel making furnace

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>
85 tons/hr electric arc furnace (EAF no. 7) with direct evacuation control (DEC) and a building evacuation system for capture and a baghouse (BGH01) for control	OAC rule 3745-31-05(A)(3) (PTI 15-1314) and OAC rule 3745-31-10 through OAC rule 3745-31-20	0.0032 grain of particulate emissions per dry standard cubic foot of exhaust gases 249 tpy of particulate emissions
		See A.I.2.b below.
		43.17 lbs/hr of PM10 189.24 tpy of PM10
		5.95 lbs/hr of sulfur dioxide (SO ₂) 26.1 tpy of SO ₂
		8.5 lbs/hr of nitrogen oxides (NO _x) 37.2 tpy of NO _x
		340 lbs/hr of carbon monoxide (CO) 1,489.2 tpy of CO
		29.75 lbs/hr of volatile organic compounds (VOC) 130.3 tpy of VOC
		0.024 lb/hr of lead (Pb) 0.1 tpy of Pb (combined emissions from P905 & P907)
		See A.I.2.d through A.I.2.f below.
		OAC rule 3745-17-07(A)
OAC rule 3745-17-11(B)	56.8 lbs/hr of particulate emissions	
	See A.I.2.b below.	
40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.a below.	
40 CFR Part 60, Subpart AAa	See A.I.2.a and A.I.2.c below.	
OAC rule 3745-17-08(B)	See A.I.2.a below.	

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-07(B)	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a** The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to the best available technology determination required pursuant to OAC rule 3745-31-05.
- 2.b** This is a combined emission limitation for emissions from the baghouse serving emissions units P905, P907, and P106. This emission limitation is based upon considering emissions units P905, P907, and P106 as similar sources, and using Figure II with an uncontrolled MRE of 7,232 lbs/hr based on an emission factor of 11.3 lbs PM/ton. Therefore, 56.8 lbs/hr X 8,760 hrs/yr X 1 ton/2,000 lbs = 249 tons/yr.
- 2.c** The following standards are requirements of 40 CFR Part 60, Subpart AAa, 40 CFR Part 52 and OAC rule 3745-31-05. Visible particulate emissions shall not exceed the following emission limitations:
- i. 3% opacity as a 6-minute average from the baghouse exit;
 - ii. 6% opacity as a 6-minute average from the melt shop [this emission limitation is more restrictive than the NSPS emission limitation which only limits emissions due solely to the operation of an EAF(s) or AOD vessel(s)]; and
 - iii. 10% opacity as a 6-minute average from the dust handling equipment.
- 2.d** The hourly emission limitations established for sulfur dioxide, nitrogen oxides, and carbon monoxide are based on the maximum hourly production rate of 85 tons of steel produced per hour.
- 2.e** The terms and conditions of this permit were established in the federally enforceable Permit to Install 15-1314 issued on June 17, 1998. The BAT determination for this emissions unit includes compliance with the Prevention of Significant Deterioration requirements.
- 2.f** The emissions from emissions unit P905 shall be vented to the No. 4 Melt Shop Baghouse. This baghouse shall have a minimum control efficiency of 99%. In addition, the system shall achieve and maintain a minimum capture efficiency that is sufficient to prevent violations of the 6% opacity emission limitation for fugitive emissions from the melt shop. The capture system for the emissions unit shall include a common canopy hood and a roof control system, both of which shall vent to the No. 4 Melt Shop Baghouse. This capture system shall also achieve and maintain a minimum capture efficiency of 99% for CO and VOC emissions.

II. Operational Restrictions

1. No more than 85 tons of steel per hour shall be processed in P905. 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. The permittee shall minimize the purchase of scrap material which is excessively oily or is coated with other combustible material in accordance with the permittee's Scrap Management Plan (SMP). All grades of scrap shall be free of excessive dirt, oil, and grease. Heavily oiled scrap shall not be used. In accordance with the SMP, the permittee shall operate a radionuclide detector which will be used to inspect all incoming scrap material into 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 pursuant to the permittee's Radiation Management Program.

II. Operational Restrictions (continued)

3. The static pressure in the the free space inside this emissions unit shall be maintained at a level which does not exceed 0.04 inch of water while the emissions unit is in operation. This static pressure level shall be maintained at all times when the EAF is operating in a meltdown and refining period. Operation at higher pressures shall be considered by the Ohio EPA, Division of Air Pollution Control (DAPC) to be unacceptable operation and maintenance of the control system.

The permittee may petition the Ohio EPA for reestablishment of the static pressure limitation whenever the permittee can demonstrate to the Agency's satisfaction that EAF operating conditions upon which the pressures were previously established are no longer applicable.

4. The damper positions for the baghouse shall be maintained in a position in the range of 45 to 81 percent. The baghouse fan motor amperes shall be maintained at 428 amps, plus or minus 15 percent, for the #1 fan and 455 amps, plus or minus 15 percent, for fans #2, 3, 4, and 6. The values of these parameters shall be maintained at the appropriate levels during operation. 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.

III. Monitoring and/or Record Keeping Requirements

1. Observations of the opacity of the visible particulate emissions, performed by a certified visible emission observer, from the outlet of the control device (BGH01) shall be conducted at least once per day of operation. The observations shall occur when the furnace is operating in the charging, melting, tapping, and refining period. These observations shall be taken in accordance with Method 9 of 40 CFR Part 60, Appendix A and, for at least four consecutive 6-minute periods, the opacity shall be recorded for point(s) where the greatest visible particulate emissions are observed, and that portion of the plume where the condensed water phase is not present in accordance with the procedures listed in Method 9 of 40 CFR Part 60, Appendix A. Where it is possible to determine that a number of visible emission sites relate to only one incident of visible emissions, only one set of four consecutive 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 opacity limitation specified in section A.I.2.c.i.

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

2. The permittee shall monitor the operation of the furnace control systems and maintain records in accordance with the following requirements:
 - a. The permittee shall calibrate and maintain a monitoring device that allows the pressure in the free space inside the EAF to be monitored. The pressure monitoring device shall have an accuracy of plus or minus 5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions.
 - b. On a once per shift basis, the permittee shall check and record the furnace static pressure, and the control system fan motor amperes and damper positions.
 - c. 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.
 - d. Upon approval by the USEPA, an alternative method may be established to replace the monitoring and record keeping requirements found in sections A.III.2.a, A.III.2.b, and A.III.2.c above.

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

3. 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 this emissions unit was in operation;
 - b. the tons of steel produced by this emissions unit; and
 - c. the average hourly production rate for this emissions unit, in tons of steel per hour, determined by dividing section A.III.3.b by section A.III.3.a.
4. The permittee shall maintain monthly records of the tons of steel produced during each calendar month.
5. 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 any non-stack egress point (e.g. windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly written deviation (excursion) reports that identify all exceedances of the opacity limitations contained in section A.I.2.c.i above. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity exceeds these limitations.
2. The permittee shall submit quarterly written deviation (excursion) reports that identify all exceedances of the furnace static pressure value established in section A.II.3, any operation of the control system damper positions outside of the range established in section A.II.4, and fan motor amperes at values other than the values established under section A.II.4.
3. The permittee shall submit quarterly written deviation (excursion) reports that identify any day in which the average hourly production rate of this emissions unit exceeded 85 tons/hr.
4. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point (i.e., windows, doors, roof monitors, etc.) serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
6. 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 Limitations:

56.8 lbs/hr of particulate emissions for the combined emissions from emissions units P905, P907 and P106

43.17 lbs/hr of PM10 for the combined emissions from emissions units P905, P907 and P106

BACT emission limitation of 0.0032 grain of particulate emissions per dry standard cubic foot of exhaust gases from the No. 4 Melt Shop Baghouse

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2.

For particulate emissions - Method 5 of 40 CFR Part 60, Appendix A.

For PM10 - Method 201 of 40 CFR Part 60, Appendix A.

1.b Emission Limitations:

3% opacity as a 6-minute average from the baghouse exit

6% opacity as a 6-minute average from the melt shop

10% opacity as a 6-minute average from the dust-handling system

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2.

Method 9, 40 CFR Part 60, Appendix A and the procedures of 40 CFR Part 60.11 shall be used to determine the opacity of the visible particulate emissions, as outlined in section A.III.1.

1.c Emission Limitation:

5.95 lbs/hr of SO₂

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the sulfur dioxide emission factor of 0.005 pound SO₂ per ton of steel produced, established during the March 24-26, 1999 emission tests, by the actual average hourly steel processing rate from section A.III.3 (tons/hour). Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2. (Method 6, 40 CFR Part 60, Appendix A.)

1.d Emission Limitation:

8.5 lbs/hr of NO_x

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the nitrogen oxides emission factor of 0.099 pound NO_x per ton of steel produced, established during the March 24-26, 1999 emission tests, by the actual average hourly steel processing rate from section A.III.3 (tons/hour). Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2. (Method 7, 40 CFR Part 60, Appendix A.)

1.e Emission Limitation:

340 lbs/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the carbon monoxide emission factor of 1.00 pound CO per ton of steel produced, established during the March 24-26, 1999 emission tests, by the actual average hourly steel processing rate from section A.III.3 (tons/hour). Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2. (Method 10, 40 CFR Part 60, Appendix A.)

V. Testing Requirements (continued)

1.f Emission Limitation:

29.75 lbs/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the VOC emission factor of 0.088 pound VOC per ton of steel produced, established during the March 24-26, 1999 emission tests, by the actual average hourly steel processing rate from section A.III.3 (tons/hour). Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2. (Method 25 or Method 25A, 40 CFR Part 60, Appendix A.)

1.g Emission Limitation:

0.024 lb/hr of Pb for combined emissions from P905 and P907

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2. (Method 12, 40 CFR Part 60, Appendix A.)

1.h Emission Limitations:

249 tpy of particulate emissions
189.24 tpy of PM10
26.1 tpy of SO₂
37.2 tpy of NO_x
1,489.2 tpy of CO
130.3 tpy of VOC
0.1 tpy of Pb

Applicable Compliance Method:

The tpy emission limitations were developed by multiplying the lbs/hr emission limitations by the maximum operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitations, compliance will also be shown with the annual emission limitations.

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

- a. The emission testing shall be conducted within 6 months prior to permit expiration for the pollutants listed in section A.V.2.e below.
- b. The test(s) shall be conducted while emissions units P106, P905, and P907 are all operating at or near their maximum capacities, unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division (CCHD, APCD).
- c. The parametric monitoring requirements established in sections A.II.4 and A.II.5 shall be checked during the emission tests.
- d. During the emission 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)

e. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

i. for particulates - Method 5 of 40 CFR Part 60, Appendix A;

(a) 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 test 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.

(b) If the test results show particulate emissions exceed the PM10 emission limitation, then the permittee shall perform a particle size distribution to determine the fraction of the PM10 present in the sample which was collected via Method 5.

ii. for opacity - Method 9 of 40 CFR Part 60, Appendix A and the procedures of 40 CFR Part 60.11;

(a) The Method 5 and Method 9 test runs shall be conducted concurrently, unless inclement weather interferes.

iii. for SO₂ - Method 6 of 40 CFR Part 60, Appendix A;

iv. for CO - Method 10 of 40 CFR Part 60, Appendix A;

v. for NO_x - Method 7 of 40 CFR Part 60, Appendix A;

vi. for VOC - Method 25 of 40 CFR Part 60, Appendix A;

vii. for Pb - Method 12 of 40 CFR Part 60, Appendix A; and

viii. for PM₁₀ - Method 201 of 40 CFR Part 60, Appendix A.

Alternate USEPA approved test methods may be substituted with prior approval of the CCHD, APCD.

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

Personnel from the CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s).

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>
85 tons/hr electric arc furnace (EAF no. 7) with direct evacuation control (DEC) and a building evacuation system for capture and a baghouse for control	OAC rule 3745-18-06(E)(1)	See B.1.2.a below.

2. Additional Terms and Conditions

- 2.a The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to the best available technology determination required pursuant to OAC rule 3745-31-05.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. An evaluation of air toxic emissions was performed by the permittee. With the exception of aluminum and zinc, emissions of other air toxic pollutants did not exceed one (1) ton per year. The air toxics analyses for Zn showed concentrations of only 1% of the MAGLC and for Al only 3% of the MAGLC. In the event that additional air toxic emissions should exceed one (1) ton per year in the future, the permittee shall perform an evaluation to determine compliance with Ohio EPA's Air Toxics Policy.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #9 EAF - #4 Melt Shop (P907)
Activity Description: Electric arc steel making furnace

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>
165 tons/hr electric arc furnace (EAF no. 9) with direct evacuation control (DEC) and a building evacuation system for capture and a baghouse (BGH01) for control	OAC rule 3745-31-05(A)(3) (PTI 15-1314) and OAC rule 3745-31-10 through OAC rule 3745-31-20	0.0032 grain of particulate emissions per dry standard cubic foot of exhaust gases 249 tpy of particulate emissions See A.I.2.b below.
		43.17 lbs/hr of PM10 189.24 tpy of PM10
		11.55 lbs/hr of sulfur dioxide (SO2) 50.6 tpy of SO2
		16.5 lbs/hr of nitrogen oxides (NOx) 72.3 tpy of NOx
		660 lbs/hr of carbon monoxide (CO) 2,890.8 tpy of CO
		57.75 lbs/hr of volatile organic compounds (VOC) 252.9 tpy of VOC
		0.024 lb/hr of lead (Pb) 0.1 tpy of Pb (combined emissions from P905 and P907)
		See A.I.2.d through A.I.2.f below. See A.I.2.a below.
	OAC rule 3745-17-07(A)	56.8 lbs/hr of particulate emissions
	OAC rule 3745-17-11(B)	See A.I.2.b below.
40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.a below.	
40 CFR Part 60, Subpart AAa	See A.I.2.a and A.I.2.c below.	
OAC rule 3745-17-08(B)	See A.I.2.a below.	

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-07(B)	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a** The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to the best available technology determination required pursuant to OAC rule 3745-31-05.
- 2.b** This is a combined emission limitation for emissions from the baghouse serving emissions units P905, P907, and P106. This emission limitation is based upon considering emissions units P905, P907, and P106 as similar sources, and using Figure II with an uncontrolled MRE of 7,232 lbs/hr based on an emission factor of 11.3 lbs PM/ton. Therefore, 56.8 lbs/hr X 8,760 hrs/yr X 1 ton/2,000 lbs = 249 tons/yr.
- 2.c** The following standards are requirements of 40 CFR Part 60, Subpart AAa, 40 CFR Part 52 and OAC rule 3745-31-05. Visible particulate emissions shall not exceed the following emission limitations:
- i. 3% opacity as a 6-minute average from the baghouse exit;
 - ii. 6% opacity as a 6-minute average from the melt shop [this emission limitation is more restrictive than the NSPS emission limitation which only limits emissions due solely to the operation of an EAF(s) or AOD vessel(s)]; and
 - iii. 10% opacity as a 6-minute average from the dust handling equipment.
- 2.d** The hourly emission limitations established for sulfur dioxide, nitrogen oxides, and carbon monoxide are based on the maximum hourly production rate of 165 tons of steel produced per hour.
- 2.e** The terms and conditions of this permit were established in the federally enforceable Permit to Install 15-1314 issued on June 17, 1998. The BAT determination for this emissions unit includes compliance with the Prevention of Significant Deterioration requirements.
- 2.f** The emissions from emissions unit P907 shall be vented to the No. 4 Melt Shop Baghouse. This baghouse shall have a minimum control efficiency of 99%. In addition, the system shall achieve and maintain a minimum capture efficiency that is sufficient to prevent violations of the 6% opacity emission limitation for fugitive emissions from the melt shop. The capture system for the emissions unit shall include a common canopy hood and a roof control system, both of which shall vent to the No. 4 Melt Shop Baghouse. This capture system shall also achieve and maintain a minimum capture efficiency of 99% for CO and VOC emissions.

II. Operational Restrictions

1. No more than 165 tons of steel per hour shall be processed in P907. 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. The permittee shall minimize the purchase of scrap material which is excessively oily or is coated with other combustible material in accordance with the permittee's Scrap Management Plan (SMP). All grades of scrap shall be free of excessive dirt, oil, and grease. Heavily oiled scrap shall not be used. In accordance with the SMP, the permittee shall operate a radionuclide detector which will be used to inspect all incoming scrap material into 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 pursuant to the permittee's Radiation Management Program.

II. Operational Restrictions (continued)

3. The static pressure in the the free space inside this emissions unit shall be maintained at a level which does not exceed 0.04 inch of water while the emissions unit is in operation. This static pressure level shall be maintained at all times when the EAF is operating in a meltdown and refining period. Operation at higher pressures shall be considered by the Ohio EPA, Division of Air Pollution Control (DAPC) to be unacceptable operation and maintenance of the control system.

The permittee may petition the Ohio EPA for reestablishment of the static pressure limitation whenever the permittee can demonstrate to the Agency's satisfaction that EAF operating conditions upon which the pressures were previously established are no longer applicable.

4. The damper positions for the baghouse shall be maintained in a position in the range of 45 to 81 percent. The baghouse fan motor amperes shall be maintained at 428 amps, plus or minus 15 percent, for the #1 fan and 455 amps, plus or minus 15 percent, for fans #2, 3, 4, and 6. The values of these parameters shall be maintained at the appropriate levels during operation. 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.

III. Monitoring and/or Record Keeping Requirements

1. Observations of the opacity of the visible particulate emissions, performed by a certified visible emission observer, from the outlet of the control device (BGH01) shall be conducted at least once per day of operation. The observations shall occur when the furnace is operating in the charging, melting, tapping, and refining period. These observations shall be taken in accordance with Method 9 of 40 CFR Part 60, Appendix A and, for at least four consecutive 6-minute periods, the opacity shall be recorded for point(s) where the greatest visible particulate emissions are observed, and that portion of the plume where the condensed water phase is not present in accordance with the procedures listed in Method 9 of 40 CFR Part 60, Appendix A. Where it is possible to determine that a number of visible emission sites relate to only one incident of visible emissions, only one set of four consecutive 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 opacity limitation specified in section A.I.2.c.i.

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

2. The permittee shall monitor the operation of the furnace control systems and maintain records in accordance with the following requirements:
 - a. The permittee shall calibrate and maintain a monitoring device that allows the pressure in the free space inside the EAF to be monitored. The pressure monitoring device shall have an accuracy of plus or minus 5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions.
 - b. On a once per shift basis, the permittee shall check and record the furnace static pressure, and the control system fan motor amperes and damper positions.
 - c. 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.
 - d. Upon approval by the USEPA, an alternative method may be established to replace the monitoring and record keeping requirements found in sections A.III.2.a, A.III.2.b, and A.III.2.c above.

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

3. 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 this emissions unit was in operation;
 - b. the tons of steel produced by this emissions unit; and
 - c. the average hourly production rate for this emissions unit, in tons of steel per hour, determined by dividing section A.III.3.b by section A.III.3.a.
4. The permittee shall maintain monthly records of the tons of steel produced during each calendar month.
5. 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 any non-stack egress point (e.g. windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly written deviation (excursion) reports that identify all exceedances of the opacity limitations contained in section A.I.2.c.i above. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity exceeds these limitations.
2. The permittee shall submit quarterly written deviation (excursion) reports that identify all exceedances of the furnace static pressure value established in section A.II.3, any operation of the control system damper positions outside of the range established in section A.II.4, and fan motor amperes at values other than the values established under section A.II.4.
3. The permittee shall submit quarterly written deviation (excursion) reports that identify any day in which the average hourly production rate of this emissions unit exceeded 165 tons/hr.
4. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point (i.e., windows, doors, roof monitors, etc.) serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
6. 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 Limitations:

56.8 lbs/hr of particulate emissions for the combined emissions from emissions units P905, P907 and P106

43.17 lbs/hr of PM10 for the combined emissions from emissions units P905, P907 and P106

BACT emission limitation of 0.0032 grain of particulate emissions per dry standard cubic foot of exhaust gases from the No. 4 Melt Shop Baghouse

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2.

For particulate emissions - Method 5 of 40 CFR Part 60, Appendix A.

For PM10 - Method 201 of 40 CFR Part 60, Appendix A.

1.b Emission Limitations:

3% opacity as a 6-minute average from the baghouse exit

6% opacity as a 6-minute average from the melt shop

10% opacity as a 6-minute average from the dust-handling system

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2.

Method 9, 40 CFR Part 60, Appendix A and the procedures of 40 CFR Part 60.11 shall be used to determine the opacity of the visible particulate emissions, as outlined in section A.III.1.

1.c Emission Limitation:

11.55 lbs/hr of SO₂

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the sulfur dioxide emission factor of 0.002 pound SO₂ per ton of steel produced, established during the April 15 and 19, 1999 emission tests, by the actual average hourly steel processing rate from section A.III.3 (tons/hour). Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2. (Method 6, 40 CFR Part 60, Appendix A.)

1.d Emission Limitation:

16.5 lbs/hr of NO_x

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the nitrogen oxides emission factor of 0.3 pound NO_x per ton of steel produced, established during the April 15 and 19, 1999 emission tests, by the actual average hourly steel processing rate from section A.III.3 (tons/hour). Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2. (Method 7, 40 CFR Part 60, Appendix A.)

1.e Emission Limitation:

660 lbs/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the carbon monoxide emission factor of 0.8 pound CO per ton of steel produced, established during the April 15 and 19, 1999 emission tests, by the actual average hourly steel processing rate from section A.III.3 (tons/hour). Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2. (Method 10, 40 CFR Part 60, Appendix A.)

V. Testing Requirements (continued)

1.f Emission Limitation:

57.75 lbs/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the VOC emission factor of 0.11 pound VOC per ton of steel produced, established during the April 15 and 19, 1999 emission tests, by the actual average hourly steel processing rate from section A.III.3 (tons/hour). Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2. (Method 25 or Method 25A, 40 CFR Part 60, Appendix A.)

1.g Emission Limitation:

0.024 lb/hr of Pb for combined emissions from P905 and P907

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2. (Method 12, 40 CFR Part 60, Appendix A.)

1.h Emission Limitations:

249 tpy of particulate emissions
189.24 tpy of PM10
50.6 tpy of SO2
72.3 tpy of NOx
2,890.8 tpy of CO
252.9 tpy of VOC
0.1 tpy of Pb

Applicable Compliance Method:

The tpy emission limitations were developed by multiplying the lbs/hr emission limitations by the maximum operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitations, compliance will also be shown with the annual emission limitations.

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

- a. The emission testing shall be conducted within 6 months prior to permit expiration for the pollutants listed in section A.V.2.e below.
- b. The test(s) shall be conducted while emissions units P106, P905, and P907 are all operating at or near their maximum capacities, unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division (CCHD, APCD).
- c. The parametric monitoring requirements established in sections A.II.4 and A.II.5 shall be checked during the emission tests.
- d. During the emission 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)

e. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

i. for particulates - Method 5 of 40 CFR Part 60, Appendix A;

(a) 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 test 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.

(b) If the test results show particulate emissions exceed the PM10 emission limitation, then the permittee shall perform a particle size distribution to determine the fraction of the PM10 present in the sample which was collected via Method 5.

ii. for opacity - Method 9 of 40 CFR Part 60, Appendix A and the procedures of 40 CFR Part 60.11;

(a) The Method 5 and Method 9 test runs shall be conducted concurrently, unless inclement weather interferes.

iii. for SO₂ - Method 6 of 40 CFR Part 60, Appendix A;

iv. for CO - Method 10 of 40 CFR Part 60, Appendix A;

v. for NO_x - Method 7 of 40 CFR Part 60, Appendix A;

vi. for VOC - Method 25 of 40 CFR Part 60, Appendix A;

vii. for Pb - Method 12 of 40 CFR Part 60, Appendix A; and

viii. for PM₁₀ - Method 201 of 40 CFR Part 60, Appendix A.

Alternate USEPA approved test methods may be substituted with prior approval of the CCHD, APCD.

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

Personnel from the CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s).

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>
165 tons/hr electric arc furnace (EAF no. 9) with direct evacuation control (DEC) and a building evacuation system for capture and a baghouse (BGH01) for control	OAC rule 3745-18-06(E)(1)	See B.1.2.a below.

2. **Additional Terms and Conditions**

- 2.a The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to the best available technology determination required pursuant to OAC rule 3745-31-05.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. An evaluation of air toxic emissions was performed by the permittee. With the exception of aluminum and zinc, emissions of other air toxic pollutants did not exceed one (1) ton per year. The air toxics analyses for Zn showed concentrations of only 1% of the MAGLC and for Al only 3% of the MAGLC. In the event that additional air toxic emissions should exceed one (1) ton per year in the future, the permittee shall perform an evaluation to determine compliance with Ohio EPA's Air Toxics Policy.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #3 Melt Shop Ladle Dryers/Preheaters (Z001)
Activity Description: Natural gas fired ladle dryer/preheater stands

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>
#3 melt shop ladle dryers/preheaters, 3 natural gas-fired ladle dryer stands each rated at 28 mmBtu/hr (84 mmBtu/hr total)	OAC rule 3745-17-07(B)(3)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 6-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.b 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. No additional controls are necessary for this emissions unit to satisfy the RACM requirements specified in OAC rule 3745-17-08(B), because the particulate emissions generated by this emissions unit are due solely to the combustion of natural gas.

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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
2. The permittee shall submit the required deviation (excursion) reports in accordance with 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. If required, compliance with the emission limitation in section A.I. of these terms and conditions shall be determined in accordance with the following method:

- 1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

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: #4 Melt Shop Ladle Dryers/Preheaters (Z002)
Activity Description: Natural gas fired ladle dryer/preheater stands

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 melt shop ladle dryers/preheaters, 6 natural gas-fired ladle dryer stands: 2 rated at 12 mmBtu/hr and 4 rated at 14 mmBtu/hr (80 mmBtu/hr total)	OAC rule 3745-17-07(B)(3)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 6-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.b 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. No additional controls are necessary for this emissions unit to satisfy the RACM requirements specified in OAC rule 3745-17-08(B), because the particulate emissions generated by this emissions unit are due solely to the combustion of natural gas.

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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
2. The permittee shall submit the required deviation (excursion) reports in accordance with 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. If required, compliance with the emission limitation in section A.I. of these terms and conditions shall be determined in accordance with the following method:

- 1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

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: AOD Vessel Preheater (Z003)
Activity Description: Natural gas fired AOD vessel preheater

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>
preheater for the AOD Vessel, natural gas-fired unit rated at 11 mmBtu/hr	OAC rule 3745-17-07(B)(3)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 6-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.b 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. No additional controls are necessary for this emissions unit to satisfy the RACM requirements specified in OAC rule 3745-17-08(B), because the particulate emissions generated by this emissions unit are due solely to the combustion of natural gas.

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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
2. The permittee shall submit the required deviation (excursion) reports in accordance with Part I - General Term and Condition A.1.c.
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. If required, compliance with the emission limitation in section A.I. of these terms and conditions shall be determined in accordance with the following method:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

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: No. 3 Melt Shop Stir Station (Z027)
Activity Description: Argon stir station

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>
#3 melt shop stir station with argon gas and wire feeder controlled by the #3 melt shop baghouse (BGH02)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(3)	See A.I.2.b below.
	OAC rule 3745-17-08(B)(3)	0.0052 grain of particulate emissions per dry standard cubic foot (gr/dscf) of exhaust gases
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.c and A.I.2.d below. Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

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 6-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 enclosing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.
- 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 following:

- i. capture of fugitive particulate emissions using canopy hoods; and
- ii. control of fugitive particulate emissions using a baghouse with an outlet emission rate of not greater than 0.0052 gr/dscf.

The collection efficiency shall be 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. Additional Terms and Conditions (continued)

- 2.d** Emissions units F003, P064, P068, P902, P903, and Z027 shall be vented to the #3 melt shop baghouse. The total allowable outlet emission rate from this baghouse, in accordance with the RACM determination, shall not exceed 0.0052 gr/dscf.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 2 to 9 inches of water, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established during the emission testing required in section A.V.2. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 1 month after completion of the emissions testing.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was 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 in operation.
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 any non-stack egress point (e.g., windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible fugitive particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible fugitive particulate emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1, as well as the corrective actions that were taken to achieve compliance.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
3. The permittee shall submit semiannual written reports that:
 - a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

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:

20% opacity as a 6-minute average (stack)

Applicable Compliance Method:

Compliance shall be determined through visible emissions 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.b Emission Limitation:

20% opacity as a 6-minute average (fugitive)

Applicable Compliance Method:

Compliance shall be determined through visible emissions 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). The points of observation for visible emissions shall include any non-stack egress points from the building enclosing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c 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 due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.d Emission Limitation:

0.0052 gr/dscf of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2 (40 CFR Part 60, Appendix A, Methods 1 through 5).

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months after issuance of the permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitations.
 - c. The following parameters shall also be monitored and recorded during the emissions testing: the process weight rate (in tons); and the pressure drop across the baghouse.
 - d. The following test method(s) shall be employed to demonstrate compliance with the allowable emission limitation(s):
 - i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and
 - ii. for the grain loading emission rate for particulate emissions, Method 5 of 40 CFR Part 60, Appendix A.
 - e. The tests shall be conducted while the emissions units identified in A.I.2.d are operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

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

Personnel from the appropriate CCHD, APCD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s).

VI. Miscellaneous Requirements

None

B. State 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>
28.2 tons/hr electric arc furnace #4 controlled by the #3 melt shop baghouse (BGH02)	OAC rule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 1,454 lbs/hr.

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

- Emission Limitation:

Sulfur dioxide emissions shall not exceed 1,454 lbs/hr.

Applicable Compliance Method:

Compliance with this limitation will be assumed due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

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.

VI. Miscellaneous Requirements

None

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