



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

10/29/2015

Certified Mail

Mr. Jeffrey Brown
TimkenSteel Corporation - Faircrest Steel Plant
1835 Dueber Avenue, S.W.
Canton, OH 44706

Facility ID: 1576222001
Permit Number: P0103991
County: Stark

RE: DRAFT AIR POLLUTION TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

A draft of the OAC Chapter 3745-77 Title V permit for the referenced facility has been issued. The purpose of this draft is to solicit public comments. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, The Canton Repository. A copy of the public notice, the Statement of Basis, and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

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

and Canton City Health Department
420 Market Avenue
Canton, OH 44702-1544

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified if a public hearing is scheduled. A decision on processing the Title V permit will be made after consideration of comments received and oral testimony if a public hearing is conducted. You will then be provided with a Preliminary Proposed Title V permit and another opportunity to comment prior to the 45-day Proposed Title V permit submittal to U.S. EPA Region 5. The permit will be issued final after U.S. EPA review is completed and no objections to the final issuance have been received. If you have any questions, please contact Canton City Health Department at (330)489-3385.

Sincerely,

A handwritten signature in cursive script that reads "Michael E. Hopkins".

Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

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

PUBLIC NOTICE

The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, or filing an appeal may be obtained at: <http://epa.ohio.gov/actions.aspx> or Hearing Clerk, Ohio EPA, 50 W. Town St., Columbus, Ohio 43215. Ph: 614-644-2129 email: HClerk@epa.ohio.gov

Draft Title V Permit Renewal

TimkenSteel Corporation - Faircrest Steel Plant

1835 Dueber Avenue, S.W., , Canton, OH 44706

ID#: P0103991

Date of Action: 10/29/2015

Permit Desc: Title V Renewal permit for a steel minimill producing steel blooms and billets utilizing molten steel from a 200 ton/hr Electric Arc Furnace..

The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the ID # or: Ed Pabin, Canton City Health Department, 420 Market Avenue, Canton, OH 44702-1544. Ph: (330)489-3385



Statement of Basis For Air Pollution Title V Permit

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| Facility ID: | 1576222001 |
| Facility Name: | TimkenSteel Corporation - Faircrest Steel Plant |
| Facility Description: | Steel mill w/ EAF |
| Facility Address: | 1835 Dueber Avenue, S.W., Canton, OH 44706 |
| Permit #: | P0103991, Renewal |
| This facility is subject to Title V because it is major for: <input type="checkbox"/> Lead <input checked="" type="checkbox"/> Sulfur Dioxide <input checked="" type="checkbox"/> Carbon Monoxide <input checked="" type="checkbox"/> Volatile Organic Compounds <input checked="" type="checkbox"/> Nitrogen Oxides <input checked="" type="checkbox"/> Particulate Matter ≤ 10 microns <input type="checkbox"/> Single Hazardous Air Pollutant <input type="checkbox"/> Combined Hazardous Air Pollutants <input type="checkbox"/> Maximum Available Control Technology Standard(s) <input checked="" type="checkbox"/> GHG <input type="checkbox"/> Title IV | |

A. Standard Terms and Conditions

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| Has each insignificant emissions unit been reviewed to confirm it meets the definition in OAC rule 3745-77-01(U)? | Yes |
| Were there any "common control" issues associated with this facility? If yes, provide a summary of those issues and explain how the DAPC decided to resolve them. | No |
| Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a minor permit modification per OAC rule 3745-77-08(C)(1) | N/A |
| Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a significant permit modification per OAC rule 3745-77-08(C)(3) | N/A |



| <p>Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a reopening per OAC rule 3745-77-08(D)</p> | <p>N/A</p> | | | | | | | | | | | | | | | | | | | | |
|--|---|----------------|--------------------|----------------|-------------|---------------|------|--|----------|------------|--|------|--------------------------------------|----------|------------|--|------|--|----------|------------|--|
| <p>Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document resulting from a renewal per OAC rule 3745-77-08(E)</p> | <p>New or Chapter 31 modified EUs added in the TV Renewal Permit: The initial TV air permit for TimkenSteel's Faircrest Steel Plant (FSP) was issued on 3-30-2004. This is the first TV renewal permit being issued. The following PTIs for new EUs and PSD Chapter 31 EU modifications have been included in this TV renewal permit:</p> <table border="1"> <thead> <tr> <th><u>EU</u></th> <th><u>Description</u></th> <th><u>PTI No.</u></th> <th><u>Date</u></th> <th><u>issued</u></th> </tr> </thead> <tbody> <tr> <td>P102</td> <td>Modify the EAF to increase annual capacity and burn used tires</td> <td>P0104388</td> <td>12-29-2010</td> <td></td> </tr> <tr> <td>P130</td> <td>New 20 mmBtu/hr oxyfuel fired boiler</td> <td>P0104388</td> <td>12-29-2010</td> <td></td> </tr> <tr> <td>P131</td> <td>New 20 mmBtu/hr natural gas-fired caster</td> <td>P0104388</td> <td>12-29-2010</td> <td></td> </tr> </tbody> </table> <p>Administrative Modification Permits issued: Administrative Modification Permits will be issued to incorporate changes to existing PTIs required because of changes made in the TV Renewal Permit. This is the case for several EUs including: B101, B102, P102, P104, P105, P115, P117, P123, P124, P127, P129, P130, and P131.</p> <p>EU change of status: P115, Ladle Dryer: Changed from insignificant to significant EU. NOx emissions > 5tpy. P117, Ladle Preheater #1: Changed from insignificant to significant EU. NOx emissions > 5tpy K101, Elkhem Inspection Unit: Changed from significant to deminimis. (with recordkeeping) G101, GDF: Changed from deminimis to insignificant w/applicable requirements because it has a PTI 15-0144. P103, Refiner: Changed from deminimis to insignificant w/applicable requirements because it has a PTI 15-0144 P106, Hot Scarfer: Changed from significant to deminimis (with recordkeeping) P118, Locomotive Sand System, Changed from insignificant to deminimis (with recordkeeping) P901, Slag Processing, (was Z101): Changed from insignificant to deminimis. (with recordkeeping) P902, Hot Metal Transfer, (was Z101): Changed from insignificant to deminimis (with recordkeeping).</p> | <u>EU</u> | <u>Description</u> | <u>PTI No.</u> | <u>Date</u> | <u>issued</u> | P102 | Modify the EAF to increase annual capacity and burn used tires | P0104388 | 12-29-2010 | | P130 | New 20 mmBtu/hr oxyfuel fired boiler | P0104388 | 12-29-2010 | | P131 | New 20 mmBtu/hr natural gas-fired caster | P0104388 | 12-29-2010 | |
| <u>EU</u> | <u>Description</u> | <u>PTI No.</u> | <u>Date</u> | <u>issued</u> | | | | | | | | | | | | | | | | | |
| P102 | Modify the EAF to increase annual capacity and burn used tires | P0104388 | 12-29-2010 | | | | | | | | | | | | | | | | | | |
| P130 | New 20 mmBtu/hr oxyfuel fired boiler | P0104388 | 12-29-2010 | | | | | | | | | | | | | | | | | | |
| P131 | New 20 mmBtu/hr natural gas-fired caster | P0104388 | 12-29-2010 | | | | | | | | | | | | | | | | | | |
| <p>Please identify the affected unit(s) and pollutant(s) for which a Compliance Assurance Monitoring (CAM) Plan is required per 40 CFR 64. Provide more emissions unit specific detail</p> | <p>CAM Plan requirements apply to particulate emissions from emissions units P102 and associated baghouse, and P111 and associated baghouse.</p> | | | | | | | | | | | | | | | | | | | | |



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| in Section C. | |
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B. Facility-Wide Terms and Conditions

| Term and Condition (paragraph) | Basis | | Comments |
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| | SIP (3745-) | Other | |
| B.1. | N | N | Lists facility-wide terms and conditions that are enforceable under state law only (none). |
| B.2. | 77-07(A)(13) | N | Lists insignificant emissions units that have applicable requirements |
| B.3. | N | Y | States applicability of 40 CFR Part 63, Subpart YYYYY, to P102. |
| B.4. | N | Y | States applicability of 40 CFR Part 60, Subpart AAa, to P102 and P129. |
| B.5. | N | Y | States applicability of 40 CFR Part 64, CAM Plan requirements, to P102 and P111 for particulate emissions. |
| B.6 | 25-03 | N | States applicability of emergency emissions control action programs. |
| B.7 | 15-05 | N | Lists deminimis Emissions Units for convenience per facility request. |

C. Emissions Unit Terms and Conditions

| <p>Key:</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p>EU = emissions unit ID</p> <p>ND = negative declaration (i.e., term that indicates that a particular rule(s) is (are) not applicable to a specific emissions unit)</p> <p>OR = operational restriction</p> <p>M = monitoring requirements</p> <p>ENF = did noncompliance issues drive the monitoring requirements?</p> </div> <div style="width: 48%;"> <p>R = record keeping requirements</p> <p>Rp = reporting requirements</p> <p>ET = emission testing requirements (not including compliance method terms)</p> <p>St = streamlining term used to replace a PTI monitoring, record keeping, or reporting requirement with an equivalent or more stringent requirement</p> <p>Misc = miscellaneous requirements</p> </div> </div> | | | | | | | | | | | | | |
|--|---|-----------------|-------|----|----|---|-----|---|----|----|----|------|--|
| EU(s) | Limitation | Basis | | ND | OR | M | ENF | R | Rp | ET | St | Misc | Comments |
| | | SIP (3745-) | Other | | | | | | | | | | |
| B101 B102 | PM ₁₀ ≤ 0.02 lb/mmBtu and 4.64 tons/yr | 31-05(A)(3) | | N | Y | Y | N | Y | Y | Y | N | N | OR – Requires that only natural gas be used as fuel. M & R – Record each day a fuel other than natural gas is burned. Record total amount of natural gas burned. Rp – Must submit quarterly deviation reports identifying each day a fuel other than natural gas is burned in these EUs. |



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| | $SO_2 \leq 0.0006$ lb/mmBtu and 0.14 tons/yr $NO_x \leq 0.15$ lb/mmBtu and 34.82 tons/yr $CO \leq 0.04$ lb/mmBtu and 9.29 tons/yr Natural Gas Firing Only | | | | | | | | | | | | | ET – These boilers are not major emissions units, and in accordance with EG #16 guidance, testing is at the discretion of the field office. The last stack testing performed was in 1990 for NOx only. Since the boiler load during the testing was not defined in the test results report, and testing of the CO emissions was not done, a one-time stack test of B102 during the TV permit life has been specified for NOx and CO emissions. The test results from B102 will be considered as representative of emissions from B101. Because the PM ₁₀ and SO ₂ emissions are so small for natural gas firing, compliance stack testing for these pollutants was deemed unnecessary. |
| B101 B102 | VE ≤ 20% | 17-07(A)(1) | | N | Y | Y | N | Y | Y | N | N | N | OR – Requires that only natural gas, which is an inherently clean fuel, be used as fuel, so no VE check requirements were necessary M & R – Record each day a fuel other than natural gas is burned. Record total amount of natural gas burned. Rp – Must submit quarterly deviation reports identifying each day a fuel other than natural gas is burned in these EUs. | |
| B101 B102 | | 17-10 | | Y | N | N | N | N | N | N | N | N | ND – The particulate emissions limitations of 0.020 lb/mmBtu is equivalent to the particulate emissions limitation established pursuant to OAC rules 3745-31-05(A)(3). | |
| B101 B102 | Exempt Exempt | 18-06 18-82(O)(2) | | Y | N | N | N | N | N | N | N | N | Pursuant to OAC rule 3745-18-06(A), these EUs are exempt from any applicable emissions limitations listed in OAC rule 3745-18-06 and 3745-18-82(O)(2) during any calendar day in which natural gas is the only fuel burned. | |
| B101 B102 | None | | 40 CFR 52.1881(b)(9)(vi)(A) | Y | N | N | N | N | N | N | N | N | The SO ₂ limitation specified by this rule is less stringent than required by OAC rule 3745-31-05(A)(3) | |
| F102 | PE ≤ 6.28 tons/yr 80% | 31-05(A)(3) | N | N | N | Y | N | Y | Y | N | N | N | Compliance with emission limitation and control efficiency accomplished through the employment of Reasonably Available Control Measures (RACM) to prevent fugitive | |



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| | control efficiency minimum | | | | | | | | | | | | | dust from becoming airborne pursuant to OAC rule 3745-17-08(B) with supporting M,R,Rp. Limitation is based on PTE, so no M,R,Rp necessary. |
| F102 | VE ≤ 10% | 17-07(B)(8)(a) | N | N | N | Y | N | Y | Y | N | N | N | N | <p>M – Weekly inspections of all plant roadways and parking areas (paved and unpaved) to determine the need for implementing control measures.</p> <p>R - Dates of when inspections were performed (or not performed with reasons why not), and total days when controls measures were implemented.</p> <p>Rp – Quarterly deviation reports specified to identify each date a required inspection was not performed (except weather related), and each date when a control measure required as a result of an inspection was not implemented.</p> <p>ET - This facility has no history of excessive fugitive dust emissions. The monitoring and recordkeeping requirements and implementation of the RACM specifications are deemed sufficient to verify compliance.</p> |
| F102 | Employ RACM | 17-08(B) | N | N | N | Y | N | Y | Y | N | N | N | N | <p>RACM to prevent fugitive dust from becoming airborne, to include vacuum and broom sweeping, watering, and covering open-top trucks</p> <p>M – Weekly inspections of all plant roadways and parking areas (paved and unpaved) to determine the need for implementing control measures.</p> <p>R - Dates of when inspections were performed (or not performed with reasons why not), and total days when controls measures were implemented.</p> <p>Rp – Quarterly deviation reports specified to identify each date a required inspection was not performed (except weather related), and each date when a control measure required as a result of an inspection was not implemented.</p> <p>ET – This facility has no history of excessive fugitive dust emissions. The monitoring and recordkeeping requirements and implementation of the control measures are deemed sufficient to verify compliance.</p> |
| P102 | CO ≤ 3.5 lb/ton, 700 lb/hr, and 2275 tons/yr | 31-10 through 31-20 (BACT) | ORC 3704.03(T) (BAT) | N | Y | Y | N | Y | Y | Y | N | N | N | <p>OR - Establishes BACT for CO emissions as the use of a DEC system on the EAF with adjustable air gap, elbow, and water cooled ductwork for enhanced CO burnout. BAT set to be equivalent to BACT.</p> <p>M&R – Daily stack and fugitive VE checks serve to indicate adequate combustion air for burnout of CO.</p> |



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| | | | | | | | | | | | | | <p>Rp - Quarterly deviation reports specified to identify each exceedance of stack or fugitive VE limitations.</p> <p>ET- The TV Permit Renewal requires testing of CO 6 months after permit issuance and 6 months before permit expiration. Applicable results of stack testing done in April 2015 which demonstrate compliance will be credited to fulfilling portions of the first 6-month stack testing requirement.</p> |
| P102 | VOC ≤ 0.17 lb/ton, 34 lb/hr, and 110.5 tons/yr | 31-10 through 31-20 (BACT) | ORC 3704.03(T) (BAT) | N | Y | Y | N | Y | Y | Y | N | N | <p>OR – Establishes BACT for VOC emissions as the Implementation and maintenance a Scrap Management Plan for control of chlorinated plastic and free organic liquid contaminants in the metallic scrap utilized by the EAF. BAT set to be equivalent to BACT.</p> <p>M & R – Recordkeeping to demonstrate compliance with the requirements of the Scrap Management Plan.</p> <p>Rp – Requires quarterly reports for all deviations from the Scrap Management Plan.</p> <p>ET - Stack testing is required within 6 months after permit issuance and 6 months prior to permit expiration. Applicable results of stack testing done in April 2015 which demonstrate compliance will be credited to fulfilling portions of the first 6-month stack testing requirement.</p> |
| P102 | Filterable PM ₁₀ ≤ 49.4 ton/yr SO ₂ ≤ 419 ton/yr combined SO ₂ from P102 and (P258 and P292 at HSP) | 31-05(D) | | N | Y | Y | N | Y | Y | N | N | N | <p>Synthetic Minor restrictions on filterable PM₁₀ and SO₂ emissions are necessary to avoid triggering PSD thresholds.</p> <p>OR – Annual steel production is limited to 1,300,000 tons as a 12-month summation. To limit PM₁₀, required to use capture and control system. To limit SO₂ emissions, the total amount of tires burned in the EAFs at the FSP and the HSP shall not exceed 12,930 tons/yr combined. In order that the 419 ton/yr SO₂ limitation is not exceeded, a procedure for calculating SO₂ emissions from the EAF with and without tire burning is established. A restriction that sulfur shall not be added to P102 is set forth. The rate of tire feed to the EF is limited to a maximum rate of 2660 lbs tires/hr.</p> <p>M & R – Terms are included to require the permittee to record the rate of tire-burning, the rate of molten steel production, and the calculated SO₂ emissions. Parametric monitoring of the baghouse (per Cam plan) and VE observations per NSPS, Subpart AAa, are required to ensure compliance with PM₁₀ limitations.</p> <p>Rp - Reports must be submitted to identify any deviations</p> |



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| | | | | | | | | | | | | | | from the monitoring and recordkeeping requirements. ET – Stack testing for PM ₁₀ and SO ₂ is required within 6 months after permit issuance and 6 months prior to permit expiration. Applicable results of stack testing done in April 2015 which demonstrate compliance will be credited to fulfilling portions of the first 6-month stack testing requirement. |
| P102 | Filterable PM ₁₀ ≤ 4.117 tons/month, Filterable PM _{2.5} ≤ 2.167 tons/month SO ₂ ≤ 28.167 tons/month NOx ≤ 10.833 tons/month | | ORC 3704.03(T) | N | Y | Y | N | Y | Y | Y | N | N | OR – for PM, Emissions must be vented to the baghouse at all times. e. For SO ₂ , Sulfur shall not be added to P102. NOx set equal to PTE so no OR,M,R,Rp necessary. M & R - Parametric monitoring of the baghouse (per Cam plan) and VE observations per NSPS, Subpart AAa, are required to ensure compliance with PM ₁₀ limitations. Rp - Reports must be submitted to identify any deviations from the monitoring and recordkeeping requirements. ET - Stack testing for PM ₁₀ , PM _{2.5} , SO ₂ and NOx is required within 6 months after permit issuance and 6 months prior to permit expiration. Applicable results of stack testing done in April 2015 which demonstrate compliance will be credited to fulfilling portions of the first 6-month stack testing requirement. | |
| P102 | Pb ≤ 0.054 tons/month | 31-05(A)(3) | | N | Y | Y | N | Y | Y | Y | N | N | OR - Emissions must be vented to the baghouse at all times. Required to control Pb contaminants in the metallic scrap in accordance with the Scrap Management Plan pursuant to MACT Subpart YYYYYY. M & R – Pb emissions are controlled by controlling the particulate emissions. Therefore parametric monitoring of the baghouse (per Cam plan) and VE observations per NSPS, Subpart AAa, are specified to ensure compliance with Pb emissions limitations. Records must be kept demonstrating compliance with the recordkeeping requirements for the control of Pb in the scrap pursuant to 40 CFR 63 Subpart YYYYYY. Rp - Reports must be submitted to identify any deviations from the monitoring and recordkeeping requirements. ET – Stack testing for Pb will coincide with the required stack testing for PM ₁₀ and PM _{2.5} . | |



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| P102 | Hg ≤ 0.0000185 lb/ton, 0.0037 lb/hr, and 0.012 ton/yr | 31-05(E) | | N | Y | Y | N | Y | Y | Y | N | N | These limitations are voluntary restrictions as proposed by the permittee for the purpose of establishing practically and legally enforceable limitations for emissions of Hg. OR - Required to control Hg contaminants in the metallic scrap in accordance with MACT Subpart YYYYY. M & R –Records must be kept demonstrating compliance with the recordkeeping requirements for the control of Hg in the scrap pursuant to 40 CFR 63 Subpart YYYYY. Rp - Reports must be submitted to identify any deviations from the monitoring and recordkeeping requirements and emissions limitations. ET – Stack testing for Hg will coincide with the required stack testing for PM ₁₀ and PM _{2.5} . |
| P102 | F ≤ 0.007 lb/ton, 1.4 lb/hr, and 4.6 tons/yr | 114 | | N | Y | Y | N | Y | Y | Y | N | N | OR – Emissions shall be vented to the baghouse at all times P102 is operating. M, R & Rp – MAGLC of F predicted from air dispersion modeling (SCREEN3). Any changes in raw material, quantities, method of operation, or changes in exhaust ductwork require re-modelling and records and reporting of the parameter changes. ET - Stack testing for Fluoride is required within 6 months after permit issuance and 6 months prior to permit expiration. Applicable results of stack testing done in April 2015 which demonstrate compliance will be credited to fulfilling portions of the first 6-month stack testing requirement. |
| P102 | None | | 3745-31-05(A)(3)(a)(ii) as effective 6/30/08 | Y | N | N | N | N | N | N | N | N | ND – Identifies that BAT will not apply to the Pb emissions after U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(ii) (the less than 10 tpy BAT exemption) as part of the Ohio SIP. |
| P102 | | 17-07(A)(1) 17-07(B)(3) 17-08 | | Y | N | N | N | N | N | N | N | N | The VE limitations and control measures established by these rules are less stringent than those required pursuant to NSPS Subpart AAa. |
| P102 | | 18-06 | | Y | N | N | N | N | N | N | N | N | The SO ₂ limitations established by this rule are less stringent than those required pursuant to ORC 3704.03(T). |
| P102 | | 17-11 | | Y | N | N | N | N | N | N | N | N | The PE limitation established by this rule is less stringent than those required pursuant to OAC rule 3745-31-05(D). |



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| P102 | Stack VE ≤ 3% Fugitive Meltshop VE ≤ 6% Dust Handling VE ≤ 10% | | 40 CFR Part 60, Subpart AAa | N | Y | Y | N | Y | Y | N | N | N | Dust Handling OR,M,R,Rp monitored under EU P129. OR – Emissions must be vented to the baghouse at all times. M & R - Parametric monitoring of the baghouse (per Cam plan) and VE observations per NSPS, Subpart AAa, are required to ensure compliance with VE limitations. Rp - Reports must be submitted to identify any deviations from the monitoring and recordkeeping requirements and incidents where investigation or corrective action(s) were not taken. ET – O, M, R, Rp are sufficient to demonstrate compliance. VE readings are also required during stack testing required within 6 months after permit issuance and 6 months prior to permit expiration. Applicable results of stack testing done in April 2015 which demonstrate compliance will be credited to fulfilling portions of the first 6-month stack testing requirement. |
| P102 | PE ≤ 0.0052 gr/dscf | | 40 CFR Part 60, Subpart AAa | Y | N | N | N | N | N | N | N | N | The mass emissions limitation established by this rule is less stringent than that required pursuant to OAC rule 3745-31-05(D) and ORC 3704.03(T). |
| P102 | | | 40 CFR Part 63, Subpart YYYYY | N | Y | Y | N | Y | Y | N | N | N | The mass and opacity emissions limitations specified by this rule are less stringent than that required pursuant to 40 CFR Part 60, Subpart AAa, and OAC rule 3745-31-05(D). Scrap management requirements still apply. OR - Required to control contaminants in the metallic scrap in accordance with MACT Subpart YYYYY. M & R –Records must be kept demonstrating compliance with the recordkeeping requirements for the control of contaminants in the scrap pursuant to 40 CFR 63 Subpart YYYYY. Rp - Reports must be submitted to identify any deviations from the monitoring and recordkeeping requirements. |
| P102 | CAM Plan | | 40 CFR Part 64 | N | Y | Y | N | Y | Y | Y | N | N | OR - Emissions must be vented to capture and control (baghouse) system at all times. M & R – Monitoring and recording of baghouse VE, ΔP, and fan motor amps. Permittee shall provide for an operating, maintenance, and inspection program for the baghouse. Rp - Reports must be submitted to identify any deviations from the monitoring and recordkeeping requirements and incidents where investigation or corrective action(s) were |



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| | | | | | | | | | | | | | | not taken. ET – The CAM Plan performance indicators will be re-verified during normally scheduled stack testing. |
| P104 P105 | $PM_{10} \leq 0.02$ lb/mmBtu and 7.01 tons/yr $SO_2 \leq 0.0006$ lb/mmBtu and 0.21 tpy $NO_x \leq 0.50$ lb/mmBtu and 175.20 tpy $CO \leq 0.04$ lb/mmBtu and 14.02 tpy Natural Gas Firing Only | 31-05(A)(3) | | N | Y | Y | N | Y | Y | Y | N | N | OR – Requires that only natural gas be used as fuel. M & R – Record each day a fuel other than natural gas is burned. Record total amount of natural gas burned. Rp – Must submit quarterly deviation reports identifying each day a fuel other than natural gas is burned in these EUs. ET – CO and NOx values from stack testing done in 2004 were in compliance with the permit allowable emissions, but the testing was done at only 30-45% rated capacity. The TV renewal permit requires additional stack testing for NOx and CO be performed at or near 100% rated load. Stack testing for SO2 and PM ₁₀ were not considered necessary because the emission limitations are very small for natural gas firing. | |
| P107 | $PM_{10} \leq 0.01$ gr/dscf and 18.92 tons/yr Use of baghouse | 31-05(A)(3) | | N | Y | Y | N | Y | Y | N | N | N | OR – The EU shall be exhausted to the baghouse. M – Weekly checks of VEs from the stack. Continuous monitoring of baghouse ΔP. R – Maintain a log to record the absence or presence of VEs observed during the VE checks. If VEs are recorded, describe the characteristics of the VEs, cause of the VEs, and any corrective actions taken to minimize the VEs. Keep records of the baghouse ΔP on a daily basis. Rp – Reports must be submitted to identify any deviations from the monitoring and recordkeeping requirements and incidents where investigation or corrective action(s) were not taken. Reports must also be submitted to identify each period of time when the baghouse ΔP was outside the acceptable range or the EU was operated and not | |



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| | | | | | | | | | | | | | <p>vented to the baghouse.</p> <p>ET – This EU was last tested and demonstrated compliance on 7-18-1990. This is a non-major EU (actual emissions < 25tpy); therefore retesting is at the discretion of the field office per EG-16. Because the 1990 test showed the particulate emissions were less than 13% of the allowable emissions, no further stack testing is deemed necessary.</p> |
| P107 P109 P111 P112 P116 | Stack VE ≤ 20%, as 6 min avg | 17-07(A)(1) | | N | Y | Y | N | Y | Y | N | N | N | <p>OR – The EU shall be exhausted to the baghouse.</p> <p>M – Daily or weekly checks of VEs from the stack.</p> <p>R – Maintain a log to record the absence or presence of VEs observed during the VE checks. If VEs are recorded, describe the characteristics of the VEs, cause of the VEs, and any corrective actions taken to minimize the VEs.</p> <p>Rp – Reports must be submitted to identify any deviations from the monitoring and recordkeeping requirements and incidents where investigation or corrective action(s) were not taken.</p> <p>ET – These EUs exhaust to high efficiency baghouses 99.0% +, and have no history of excessive VEs. The monitoring and recordkeeping requirements are deemed sufficient to verify compliance. Accordingly no further testing of VEs is deemed necessary.</p> |
| P107 P109 P111 P112 P116 | Fugitive VE ≤ 20%, as 3 min avg | 17-07(B)(1) | | N | N | Y | Y | N | Y | N | N | N | <p>OR – The EU shall be exhausted to the baghouse.</p> <p>M – Daily or weekly checks of VEs from the building egress points.</p> <p>R – Maintain a log to record the absence or presence of VEs observed during the VE checks. If VEs are recorded, describe the characteristics of the VEs, cause of the VEs, and any corrective actions taken to minimize the VEs.</p> <p>Rp – Reports must be submitted to identify any deviations from the monitoring and recordkeeping requirements and incidents where investigation or corrective action(s) were not taken.</p> <p>ET – This facility has no history of excessive fugitive dust emissions. The monitoring and recordkeeping requirements and implementation of the RACM specifications are deemed sufficient to verify compliance.</p> |
| P107 P109 P111 P112 | Employ RACM Stack PE ≤ | 17-08(B)(3) | | N | N | Y | Y | N | Y | N | N | N | <p>The mass and opacity emissions limitations specified by this rule are less stringent than that required pursuant to OAC rule 3745-31-05(A)(3). Control measures still apply. Employ Reasonably Available Control Measures (RACM)</p> |



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| P116 | 0.030 gr/dscf or No VEs from Stack | | | | | | | | | | | | | to prevent fugitive dust from becoming airborne, to include capture hoods venting to a baghouse OR – The EU shall be exhausted to the baghouse. M – Daily or weekly checks of VEs from the building egress points. R – Maintain a log to record the absence or presence of VEs observed during the VE checks. If VEs are recorded, describe the characteristics of the VEs, cause of the VEs, and any corrective actions taken to minimize the VEs. Keep records of the baghouse ΔP on a daily basis. Rp – Reports must be submitted to identify any deviations from the monitoring and recordkeeping requirements and incidents where investigation or corrective action(s) were not taken. Reports must also be submitted to identify each period of time when the baghouse ΔP was outside the acceptable range or the EU was operated and not vented ET – This facility has no history of excessive fugitive dust emissions. The monitoring and recordkeeping requirements and implementation of the RACM specifications are deemed sufficient to verify compliance. |
| P107 P109 P111 P112 P116 P129 | | 17-11(B)(1) | | Y | N | N | N | N | N | N | N | N | N | ND – The particulate emissions limitation required by this rule is less stringent than the emissions limitation pursuant to 3745-31-05(A)(3) |
| P109 | PM ₁₀ ≤ 0.01 gr/dscf and 2.65 tons/yr Use of baghouse | 31-05(A)(3) | | N | Y | Y | N | Y | Y | N | N | N | N | OR – The EU shall be exhausted to the baghouse. M – Weekly checks of VEs from the stack. Continuous monitoring of baghouse ΔP. R – Maintain a log to record the absence or presence of VEs observed during the daily VE checks. If VEs are recorded, describe the characteristics of the VEs, cause of the VEs, and any corrective actions taken to minimize the VEs. Keep records of the baghouse ΔP on a daily basis. Rp – Reports must be submitted to identify any deviations from the monitoring and recordkeeping requirements and incidents where investigation or corrective action(s) were not taken. Reports must also be submitted to identify each period of time when the baghouse ΔP was outside the acceptable range or the EU was operated and not vented to the baghouse. |



Statement of Basis

TimkenSteel Corporation - Faircrest Steel Plant

Permit Number: P0103991

Facility ID: 1576222001

| | | | | | | | | | | | | | | |
|------|---|-------------|----------------|---|---|---|---|---|---|---|---|---|--|---|
| | | | | | | | | | | | | | | ET – Last stack testing done in 1993 for particulate emissions showed emissions were only 7% of the permit allowable. Because this is a non-major EU testing at less than 50% of the allowable emissions, additional stack testing is deemed unnecessary per EG-16. |
| P111 | PM ₁₀ ≤ 0.01 gr/dscf and 13.5 tons/yr Use of baghouse | 31-05(A)(3) | | N | Y | Y | N | Y | Y | Y | N | N | | OR – The EU shall be exhausted to the baghouse. M – Monitoring in accordance with the CAM Plan. R – Maintain a log to record the absence or presence of VEs observed during the daily VE checks. If VEs are recorded, describe the characteristics of the VEs, cause of the VEs, and any corrective actions taken to minimize the VEs. Keep records of the baghouse ΔP on a daily basis. Rp – Reports must be submitted to identify any deviations from the CAM Plan requirements. Reports must also be submitted to identify each period of time when the EU was operated and not vented to the baghouse. ET – Because this EU has no record of ever being stack tested, and it is subject to a CAM plan, T&C's for stack testing within 6 months of the TV permit issuance date have been included. |
| P111 | CAM | | 40 CFR Part 64 | N | Y | Y | N | Y | Y | Y | N | N | | OR – The EU shall be exhausted to the baghouse. M & R - Maintain a log to record the absence or presence of VEs observed during the daily VE checks. If VEs are recorded, describe the characteristics of the VEs, cause of the VEs, and any corrective actions taken to minimize the VEs. Keep records of the baghouse ΔP on a daily basis. Rp – Reports must be submitted to identify any deviations from the CAM Plan requirements. Reports must also be submitted to identify each period of time when the EU was operated and not vented to the baghouse. ET – Because this EU has no record of ever being stack tested, and it is subject to a CAM plan, T&C's for stack testing within 6 months of the TV permit issuance date have been included. |
| P112 | PM ₁₀ ≤ 0.01 gr/dscf and 13.24 tons/yr | 31-05(A)(3) | | N | Y | Y | N | Y | Y | N | N | N | | OR – The EU shall be exhausted to the baghouse. M – Daily checks of VEs from the stack. Continuous monitoring of baghouse ΔP. R – Maintain a log to record the absence or presence of VEs observed during the daily VE checks. If VEs are |



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| | Use of baghouse | | | | | | | | | | | | | <p>recorded, describe the characteristics of the VEs, cause of the VEs, and any corrective actions taken to minimize the VEs. Keep records of the baghouse ΔP on a daily basis.</p> <p>Rp – Reports must be submitted to identify any deviations from the monitoring and recordkeeping requirements and incidents where investigation or corrective action(s) were not taken. Reports must also be submitted to identify each period of time when the baghouse ΔP was outside the acceptable range or the EU was operated and not vented to the baghouse.</p> <p>ET – This EU was last tested and demonstrated compliance on 8-28-1990. This is a non-major EU (actual emissions < 25tpy); therefore retesting is at the discretion of the field office per EG-16. Because the 1990 test showed the particulate emissions were only 24% of the allowable emissions, no further stack testing is deemed necessary.</p> |
| P116 | $PM_{10} \leq 0.01$ gr/dscf and 23.52 tons/yr Use of baghouse | 31-05(A)(3) | | N | Y | Y | N | Y | Y | N | N | N | <p>OR – The EU shall be exhausted to the baghouse.</p> <p>M – Daily checks of VEs from the stack. Continuous monitoring of baghouse ΔP.</p> <p>R – Maintain a log to record the absence or presence of VEs observed during the daily VE checks. If VEs are recorded, describe the characteristics of the VEs, cause of the VEs, and any corrective actions taken to minimize the VEs. Keep records of the baghouse ΔP on a daily basis.</p> <p>Rp – Reports must be submitted to identify any deviations from the monitoring and recordkeeping requirements and incidents where investigation or corrective action(s) were not taken. Reports must also be submitted to identify each period of time when the baghouse ΔP was outside the acceptable range or the EU was operated and not vented to the baghouse.</p> <p>ET – This EU was last tested and demonstrated compliance on 4-6-1990. This is a non-major EU (actual emissions < 25tpy); therefore retesting is at the discretion of the field office per EG-16. Because the 1990 test showed the particulate emissions were only 52% of the allowable emissions, no further stack testing is deemed necessary.</p> | |
| P115 | $PM_{10} \leq 0.020$ | 31-05(A)(3) | | N | Y | Y | N | Y | Y | N | N | N | <p>OR – Only natural gas can be used as fuel.</p> <p>M & R – Record each day when a fuel other than natural</p> | |



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| P117 | lb/mmBtu $\text{NO}_x \leq 0.50$ lb/mmBtu and 21.90 tons/yr $\text{CO} \leq 0.04$ lb/mmBtu and 1.75 tons/yr Natural gas firing only $\text{PM}_{10} \leq$ 0.020 lb/mmBtu $\text{NO}_x \leq 0.50$ lb/mmBtu and 15.33 tons/yr $\text{CO} \leq 0.04$ lb/mmBtu and 1.23 tons/yr Natural gas firing only | | | | | | | | | | | | gas is fired. Record the total amount of natural gas burned per year. Rp – Quarterly deviation reports must be submitted to identify each day when a fuel other than natural gas was burned in these EUs. ET – These EUs exhaust into the Meltshop baghouse which is common to the EAF and other EUs in the Meltshop. It is not possible to isolate and test only the emissions from P115 or P117. Compliance is calculated using the emissions factors for PM, NOx, and CO from the original PTI 15-0144. Compliance with the EUs' PM ₁₀ , NOx, and CO limits is assumed if the common allowable emissions from the Meltshop baghouse for PM ₁₀ , NOx, and CO are met when testing the EAF emissions. |
| P104 P105 P115 P117 P123 P124 P127 P130 P131 | Exempt | 17-07(A)(1) | | Y | N | N | N | N | N | N | N | N | ND – The EUs are exempt from the VE limitation specified in OAC rule 17-07(A)(1), pursuant to OAC rule 3745-17-07(A)(3)(h), because the EUs are not subject to the requirements of OAC rule 3745-17-11 |
| P104 P105 P115 | Exempt | 17-11 | | Y | N | N | N | N | N | N | N | N | ND – The uncontrolled mass rate of particulate emissions from these EUs is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II |



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| P117 P123 P124 P127 P130 P131 | | | | | | | | | | | | | | does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(4) because the process weight rate that causes any emissions of particulate matter is equal to zero. |
| P104 P105 P115 P117 P123 P124 P127 P130 P131 | Exempt | 17-10 | | Y | N | N | N | N | N | N | N | N | N | ND - These emissions units are designed such that the products of combustion come into direct contact with materials being processed and therefore do not meet the definition of "fuel burning equipment" given in OAC rule 3745-17-01(B)(5). They are, therefore, exempt from the emission limitations and control requirements contained in OAC rule 3745-17-10 for fuel burning equipment. |
| P104 P105 P115 P117 P123 P124 P127 P130 P131 | Exempt Exempt | 18-06(E) 18-82(A) | | Y | N | N | N | N | N | N | N | N | N | The burning of natural gas is the only source of SO ₂ from these EUs. Pursuant to OAC rule 3745-18-06(C), these EUs are exempt from OAC rule 3745-18-06(E) and 3745-18-82 because the process weight input (excluding gaseous fuels) that causes any emissions of SO ₂ is equal to zero (less than 1000 lb/hr). |
| P123 P124 | PM ₁₀ ≤ 0.130 lbs/hr and 0.569 tons/yr VOC ≤ 0.122 lb/hr and 0.534 tpy NO _x ≤ 2.940 lb/hr and 12.877 tpy CO ≤ 0.740 lb/hr and 3.241 tpy | 31-05(A)(3) | N | N | Y | Y | N | Y | Y | Y | N | N | N | OR – Requires that only oxyfuel be used as fuel. M & R – Record each day a fuel other than oxyfuel is burned. Record total amount of oxyfuel burned. Rp – Must submit quarterly deviation reports identifying each day a fuel other than oxyfuel is burned in these EUs. ET –The last stack testing performed was in January 1996 for NO _x only and were in compliance with the permit allowable emissions, but the testing was done at only 29% rated capacity. Since the EU load during the testing was low, and testing of the CO emissions was not done, a one-time stack test of P123 during the TV permit life has been specified for NO _x and CO emissions. The test results from P123 will be considered as representative of emissions from P124. Stack testing for VOC and PM ₁₀ were not considered necessary because the emission limitations are very small for natural gas firing. |



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| | Oxyfuel Firing Only | | | | | | | | | | | | |
| P127 | $PM_{10} \leq 0.0075$ lb/mmBtu, 0.15 lb/hr, and 0.66 tons/yr $NO_x \leq 0.14$ lb/mmBtu, 2.8 lb/hr, and 12.3 tons/yr $CO \leq 0.082$ lb/mmBtu, 1.64 lb/hr, and 7.18 tons/yr $SO_2 \leq 0.0006$ lb/mmBtu $VOC \leq 0.0054$ lb/mmBtu, 0.108 lb/hr, and 0.47 tons/yr Stack VE $\leq 5\%$ Oxyfuel firing only | 31-05(A)(3) (BAT) 31-10 through 31-20 (BACT) | N | Y | Y | N | Y | Y | N | N | N | <p>OR – Establishes BACT for all pollutants as Only oxyfuel can be used as fuel. BAT set to be equivalent to BACT</p> <p>M & R – Record each day when a fuel other than oxyfuel is fired. Record the total amount of oxyfuel burned per year.</p> <p>Rp – Quarterly deviation reports must be submitted to identify each day when a fuel other than oxyfuel was burned in the EU.</p> <p>ET – The EF used for NOx emissions from this EU in its original PTI 15-01339 was 40% higher than the AP-42 EF for natural gas with “B” rating. The EF used for CO was the same as the AP-42 value, and also rated “B”. Considering the good EF ratings, the 40% NOx margin, and the fact that NOx and CO emissions will be less when combusting with 100% oxygen vs atmospheric air, stack testing to demonstrate compliance with the allowables for NOx and CO is deemed unnecessary.</p> <p>Emissions of the remaining pollutants are less than 1 tpy, therefore stack testing for these emissions is considered unnecessary.</p> <p>Since this is an inherently clean EU, formal Method 9 readings are specified on an “as required” basis.</p> | |
| P129 | $PM_{10} \leq 0.01$ gr/dscf, 0.27 lb/hr, and 1.18 | 31-05(A)(3) (BAT) 31-10 through 31- | N | Y | Y | N | Y | Y | N | N | N | <p>OR – Establishes BACT for PM emissions as Emissions shall be vented to the cyclone and baghouses whenever the EU is operating. BAT set to be equivalent to BACT.</p> <p>M – Weekly checks of fugitive or VEs from the stack.</p> <p>R – Maintain a log to record the absence or presence of</p> | |



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| | tons/yr from secondary baghouse $PM_{10} \leq 0.01$ gr/dscf, 0.13 lb/hr, and 0.57 tons/yr from tertiary baghouse Use of baghouse | 20 (BACT) | | | | | | | | | | | | VEs observed during the weekly VE checks. If VEs are recorded, describe the characteristics of the VEs, cause of the VEs, and any corrective actions taken to minimize the VEs. Rp – Reports must be submitted to identify any deviations from the monitoring and recordkeeping requirements and incidents where investigation or corrective action(s) were not taken. ET - This is a non-major EU with very low emission limits. There have been no reports of fugitive or stack VE's for the past 2 years. Additional stack testing is deemed unnecessary. |
| P129 | Fugitive or Stack VE $\leq 10\%$ | | 40 CFR Part 60, Subpart AAa | N | Y | Y | N | Y | Y | N | N | N | N | OR – Emissions shall be vented to the baghouses whenever the EU is operating. M – Weekly checks of fugitive or VEs from the stack. R – Maintain a log to record the absence or presence of VEs observed during the weekly VE checks. If VEs are recorded, describe the characteristics of the VEs, cause of the VEs, and any corrective actions taken to minimize the VEs. Rp – Reports must be submitted to identify any deviations from the monitoring and recordkeeping requirements and incidents where investigation or corrective action(s) were not taken. |
| P129 | Employ RACM Stack PE ≤ 0.030 gr/dscf or No VEs from Stack | 17-08(B)(3) | | N | N | Y | Y | N | Y | N | N | N | N | The mass and opacity emissions limitations specified by this rule are less stringent than that required pursuant to OAC rule 3745-31-05(A)(3). Control measures still apply. Employ Reasonably Available Control Measures (RACM) to prevent fugitive dust from becoming airborne, to include capture hoods venting to a baghouse OR – The EU shall be exhausted to the baghouse. M – Weekly checks of VEs from the stack and building egress points. R – Maintain a log to record the absence or presence of VEs observed during the VE checks. If VEs are recorded, describe the characteristics of the VEs, cause of the VEs, and any corrective actions taken to minimize the VEs. |



DRAFT

**Division of Air Pollution Control
Title V Permit
for
TimkenSteel Corporation - Faircrest Steel Plant**

| | |
|----------------|-----------------------------------|
| Facility ID: | 1576222001 |
| Permit Number: | P0103991 |
| Permit Type: | Renewal |
| Issued: | 10/29/2015 |
| Effective: | To be entered upon final issuance |
| Expiration: | To be entered upon final issuance |



Division of Air Pollution Control
Title V Permit
for
TimkenSteel Corporation - Faircrest Steel Plant

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Draft Title V Permit
TimkenSteel Corporation - Faircrest Steel Plant
Permit Number: P0103991
Facility ID: 1576222001
Effective Date: To be entered upon final issuance

Authorization

Facility ID: 1576222001
Facility Description: Steel mill w/ EAF
Application Number(s): A0036181, A0041791, A0042988, A0049121, A0050467, A0053116
Permit Number: P0103991
Permit Description: Title V Renewal permit for a steel minimill producing steel blooms and billets utilizing molten steel from a 200 ton/hr Electric Arc Furnace.
Permit Type: Renewal
Issue Date: 10/29/2015
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Superseded Permit Number: P0101485

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

TimkenSteel Corporation - Faircrest Steel Plant
1835 Dueber Avenue, S.W.
Canton, OH 44706

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Canton City Health Department
420 Market Avenue
Canton, OH 44702-1544
(330)489-3385

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Canton City Health Department. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director



Draft Title V Permit
TimkenSteel Corporation - Faircrest Steel Plant
Permit Number: P0103991
Facility ID: 1576222001
Effective Date: To be entered upon final issuance

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
 - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
 - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements
 - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (5) Standard Term and Condition A. 30.

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

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

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

- c) The permittee shall submit required reports in the following manner:
- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

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

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

Any submitted scheduled maintenancerequests, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the

probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Canton City Health Department. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

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

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

See A.29 below if no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Canton City Health Department by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable



requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

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

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

- (4) Each written report shall be signed by a Responsible Official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

- (5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Canton City Health Department unless otherwise specified.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

4. Risk Management Plans

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

- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

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

5. Title IV Provisions

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

(Authority for term: OAC rule 3745-77-07(A)(5))

6. Severability Clause

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

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

7. General Requirements

- a) 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 except as provided pursuant to A.16 below.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.

- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.
- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
- (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
 - (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
 - (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

(Authority for term: OAC rule 3745-77-07(A)(8))

9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(Authority for term: OAC rule 3745-77-07(A)(9))

10. 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 standard terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

11. Reopening for Cause

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

- a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

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

12. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

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

13. 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:
- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the Canton City Health Department concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the Canton City Health Department) and the Administrator of the U.S. EPA in the following manner and with the following content:
- (1) 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.
 - (2) Compliance certifications shall include the following:
 - a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.
 - b. The permittee's current compliance status.



- c. Whether compliance was continuous or intermittent consistent with A.13.d.2.a above.
 - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.
 - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
- (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

14. Permit Shield

- a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

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

15. 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 Canton City Health Department 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 Canton City Health Department as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

16. Emergencies

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

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

17. Off-Permit Changes

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

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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

18. 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 Federal Register 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

(Authority for term: OAC rule 3745-77-07(A)(1))

20. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-07(A)(1))

21. Air Pollution Nuisance

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

(Authority for term: OAC rule 3745-77-07(A)(1))

22. Permanent Shutdown of an Emissions Unit

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

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

Unless otherwise exempted, no emissions unit identified in this permit that has been certified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

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

23. Title VI Provisions

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



- a) Persons operating appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

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

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the Canton City Health Department.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Canton City Health Department. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, 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.)

25. Records Retention Requirements Under State Law Only

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.

26. 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.

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

27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

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 Canton City Health Department 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).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Canton City Health Department must be notified in writing of any transfer of this permit.

(Authority for term: OAC rule 3745-77-01(C))

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

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

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

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potential to emit; or
- c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.

30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air



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Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Canton City Health Department, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.



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B. Facility-Wide Terms and Conditions



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.
2. The following insignificant emissions units at this facility must comply with all applicable State and Federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit to install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirement contained in a permit-to-install or in the SIP-approved versions of OAC Chapters 3745-17, 3745-18, 3745-21, 3745-31, and/or 40 CFR Part 60 or 63:
 - a) G101: Gasoline Dispensing Facility (PTI 15-0144 issued on 07/19/1995)
 - b) P103: Degasser Refiner (PTI 15-0144 issued on 07/19/1995)
 - c) P119: Natural gas-fired 7 mmBtu/hr Ladle Preheater #2 (PTI 15-860 issued on 10/25/1995)
 - d) P120: Natural gas-fired 7 mmBtu/hr Ladle Preheater #3 (PTI 15-860 issued on 10/25/1995)
 - e) P121: Natural gas-fired 7 mmBtu/hr Ladle Preheater #4 (PTI 15-860 issued on 10/25/1995)
3. The following emissions unit in this permit is subject to National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63, Subpart YYYYY, Maximum Achievable Control Standards (MACT): P102. The complete NESHAP/MACT requirements, including the NESHAP/MACT General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Canton City Health Department, Air Pollution Control Division.
4. The following emissions units in this permit are subject to New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart AAa, for Electric Arc Furnaces in Steel Plants: P102 and P129. The complete NSPS requirements, including the NSPS General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Canton City Health Department, Air Pollution Control Division.
5. Pursuant to 40 CFR Part 64, the permittee is subject to Compliance Assurance Monitoring (CAM) plans for particulate emissions from emissions units P102, and P111 at this facility. The permittee shall comply with the provisions of the CAM plans during any operation of the aforementioned emissions units.
6. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25 because this facility has air contaminant source(s) which may emit 0.25 tons per day or more of CO, VOC, NOx, and SO₂. The permittee shall develop and submit emission control action programs as specified in OAC rule 3745-25-04 and in accordance with Ohio EPA DAPC Engineering Guide #64.
7. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements and because they meet the "de minimis" criteria established in OAC rule 3745-15-05:
 - a) F109: Forge Press, 3300 Ton
 - b) K101: Elkem Inspection Unit with overspray filters



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- c) L103: Parts Washer
- d) P106: Hot Scarfer Machine: 4-sided hot scarfer equipped with a wet electrostatic precipitator
- e) P118: Locomotive Sand System
- f) P133: Ladle Refiner #2
- g) P901: Slag Processing
- h) P902: Hot Metal Transfer
- i) P904: Saws
- j) P905: Ingot Shakeout Area
- k) P908: Spray Painting/Marking
- l) P909: Caster Cutoff Torch



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C. Emissions Unit Terms and Conditions



1. F102, Roadways and Parking Areas

Operations, Property and/or Equipment Description:

Paved and Unpaved Roadways and Parking Areas used by vehicles with 4 to 32 wheels.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|--|
| a. | OAC rule 3745-31-05(A)(3) (PTI 15-0144 issued 07/19/1995) | Particulate emissions of fugitive dust shall not exceed 6.28 tons/yr. Minimum control efficiency of 80% shall be achieved by sweeping and flushing. See b)(2)a. and b)(2)h. The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-07(B)(8)(a) and 3745-17-08(B). |
| b. | OAC rule 3745-17-07(B)(8)(a) | Visible particulate emissions from any paved or unpaved roadway or parking area shall not exceed 10% opacity as determined in accordance with paragraph (B)(3) of OAC rule 3745-17-03. See b)(2)a. |
| c. | OAC 3745-17-08(B) | Reasonably available control measures (RACM) shall be employed that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)a. through b)(2)h. |

(2) Additional Terms and Conditions

a. The 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:



| Identification | Surface | Composition | Approx. Area (sq. ft.) |
|------------------|---------|---------------|------------------------|
| Parking Areas 1 | Unpaved | Gravel | 403,500 |
| Parking Areas 2 | Paved | Asphalt | 23,500 |
| Plantwide Road 1 | Paved | Asphalt | 421,950 |
| Plantwide Road 2 | Paved | Chip and Seal | 576,585 |

- b. The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by vacuum sweeping and/or broom sweeping and/or flushing with water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- c. The permittee shall employ reasonably available control measures on all unpaved parking areas and the unpaved shoulders of all paved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat these unpaved areas with water and/or any other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- d. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- e. Any unpaved roadway or parking area, which during the term of this permit is paved, shall be subject to the visible emission limitation and control measures for paved roadways and parking areas.
- f. 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.
- g. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary and feasible for the materials being transported.
- h. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-31-05(A)(3) and 3745-17-08(B).



c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies:

| Identification | Minimum inspection frequency |
|------------------|------------------------------|
| Parking Areas 1 | Weekly |
| Parking Areas 2 | Weekly |
| Plantwide Road 1 | Weekly |
| Plantwide Road 2 | Weekly |

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

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

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

- (3) The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates and types of control measures 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.

The information required in d)(3)d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

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



e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following, at a minimum:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

[Authority for term: OAC rules 3745-77-07(A)(3)(c) and 3745-15-03(C)]

- (2) All reports shall be submitted in accordance with the reporting requirements of Part A: Standard Terms and Conditions of this permit. Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-15-03(A)]

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

Particulate emissions of fugitive dust shall not exceed 6.28 tons/yr.

Applicable Compliance Method:

The tons/yr limitation shall be demonstrated by calculation in accordance with the procedures and use of Emissions Factors given in AP-42, "Compilation of Air Pollutant Emission Factors" 5th Edition, Section 13.2.1, (Jan. 2011), for Paved Roads, and Section 13.2.2, (Nov. 2006), for Unpaved Roads.

b. Emission Limitation:

Visible particulate emissions from any paved roadway or parking area shall not exceed 10% opacity as determined in accordance with paragraph (B)(3) of OAC rule 3745-17-03.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation listed above shall be determined in accordance with U.S. EPA Method 9 and the modifications listed in paragraph (B)(3)(d) of OAC rule 3745-17-03.

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



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- g) Miscellaneous Requirements
 - (1) None.



2. P102, #1 EAF

Operations, Property and/or Equipment Description:

200 ton steel/hr Electric Arc Furnace (EAF #1) with Direct Evacuation Control (DEC) and building evacuation system both exhausting to a common meltshop baghouse (BHC-1).

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) b)(1)e., b)(1)g., b)(2)e., d)(14), d)(15), d)(16), d)(17), and e)(3)
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|---|
| a. | OAC rules 3745-31-10 through OAC rule 3745-31-20 (Administrative Modification to P0104388 to be issued) [Best Available Control Technology (BACT) Determinations] | CO emissions shall not exceed 3.5 lbs/ton, 700 lbs/hr, and 2275 tons/yr. VOC emissions shall not exceed 0.17 lb/ton, 34 lbs/hr, and 110.5 tons/yr. See b)(2)c., b)(2)h., and c)(9) |
| b. | OAC rule 3745-31-05(D) (Administrative Modification to P0104388 to be issued) [Synthetic Minor Restrictions to Avoid Major Source New Source Review] | Filterable PM ₁₀ emissions shall not exceed 49.4 tons/yr as a rolling, 12-month summation. See b)(2)j., c)(1), c)(2), and c)(9). SO ₂ emissions from Emission Units P102, P258, and P292 combined shall not exceed 419 tons/yr as a rolling, 12-month summation. See c)(3), c)(4), c)(5), and c)(9). |
| c. | ORC 3704.03(T) (Administrative Modification to P0104388 to be issued) [Best Available Technology (BAT) Determinations for NAAQS Pollutants > 10 TPY] | Filterable PM ₁₀ emissions shall not exceed 4.117 tons/month averaged over a 12-month rolling period. Filterable PM _{2.5} emissions shall not exceed 2.167 tons/month averaged over a 12-month rolling period. See b)(2)a., b)(2)b., b)(2)c., c)(1), and c)(9). |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|---|
| | | <p>SO₂ emissions shall not exceed 28.167 tons/month averaged over a 12-month rolling period .</p> <p>NO_x emissions shall not exceed 10.833 tons/month averaged over a 12-month rolling period.</p> <p>The emissions limitations for CO and VOC specified by this rule are equivalent to the emissions limitations established pursuant to OAC rules 3745-31-10 through OAC rule 3745-31-20.</p> |
| d. | <p>OAC rule 3745-31-05(A)(3) June 30, 2008</p> <p>(Administrative Permit Modification to P0104388 to be issued)</p> <p>[Best Available Technology (BAT) for NAAQS Pollutants < 10 TPY]</p> | <p>Lead (Pb) emissions shall not exceed 0.054 tons/month averaged over a 12-month rolling period.</p> <p>See b)(2)c., b)(2)d., and c)(1).</p> |
| e. | <p>OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008</p> <p>[Best Available Technology (BAT) Exemption for NAAQS Pollutants < 10 TPY]</p> | <p>The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the Pb emissions from this air contaminant source since the potential to emit, taking into account air pollution controls serving this unit, are less than 10 tons/year.</p> <p>See b)(2)e.</p> |
| f. | <p>OAC rule 3745-31-05(E) (Administrative Permit Modification to P0104388 to be issued)</p> <p>[Voluntary Restrictions]</p> | <p>Mercury (Hg) emissions shall not exceed 0.0000185 lb/ton steel, 0.0037 lb/hr and 0.012 ton/yr. See b)(2)c. and b)(2)f.</p> <p>Scrap Management Plan. See c)(8).</p> |
| g. | <p>OAC rule 3745-114 ORC 3704.03(F)(4)(d) [Toxic Air Contaminant]</p> | <p>Fluoride emissions shall not exceed 0.007 lb/ton steel, 1.4 lb/hr, and 4.6 ton/yr. See b)(2)c. and b)(2)g.</p> |
| h. | <p>OAC rule 3745-17-11</p> | <p>The 58.51 lb/hr particulate emission (PE) limitation specified by this rule is less stringent than the PM₁₀ emissions limitation established pursuant to OAC rule 3745-31-05(D).</p> |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|--|
| i. | OAC rule 3745-17-07(A)(1) OAC rule 3745-17-07(B)(3) OAC rule 3745-17-08 | The visible emission limitations and/or control measures specified by these rules are less stringent than the visible emission limitations established pursuant to 40 CFR Part 60, Subpart AAa. |
| j. | OAC rule 3745-18-06 | The SO ₂ emissions limitation specified by this rule is less stringent than the SO ₂ emissions limitation established pursuant to ORC 3704.03(T). |
| k. | 40 CFR Part 60, Subpart AAa (40 CFR 60.270a – 60.276a) [In accordance with 40 CFR 60.270a, this emissions unit is an electric arc furnace (EAF) located at a steel plant that commenced construction or modification after August 17, 1983] | Visible particulate emissions from the baghouse shall not exceed three (3) per cent opacity as a six-minute average. Visible particulate emissions of fugitive dust from the melt shop shall not exceed six (6) per cent opacity as a six-minute average. Visible particulate emissions from the melt shop baghouse dust handling equipment shall not exceed ten (10) per cent opacity as a six-minute average. Note: this limit is applicable and monitored under EU P129 in this permit. The mass emissions limitation of 0.0052 gr/dscf of particulate emissions from control device specified by this rule is less stringent than the mass emissions limitations established pursuant to OAC rule 3745-31-05(D) and ORC 3704.03(T). |
| l. | 40 CFR Part 60, Subpart A (40 CFR 60.1 - 60.19) | General Provisions |
| m. | 40 CFR Part 63, Subpart YYYYY (40 CFR 63.10681 - 63.10692) [In accordance with 40 CFR 63.10680(a) and (b)(1), this emissions unit is an electric arc furnace (EAF) that is an area source of hazardous air pollutants (HAPs) and commenced construction on or before September 20, 2007.] | 0.0052 gr/dscf of PM from control device [63.10686(b)(1)] Visible particulate emissions of fugitive dust from the melt shop shall not exceed six (6) per cent opacity [63.10686(b)(2)] The mass emissions limitations and opacity limitations specified by 63.10686(b)(1) and (b)(2) of this rule are less stringent than the emissions limitations established pursuant to 40 |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|---|
| | | CFR Part 60, Subpart AAa, ORC 3704.03(T), and OAC rule 3745-31-05(D). See b)(2)i., c)(1), c)(6), and c)(7) |
| n. | 40 CFR Part 63, Subpart A (40 CFR 63.1 - 63.16) (40 CFR 63.10690) | Table 1 to Subpart YYYYYY of 40 CFR Part 63 – Applicability of General Provisions to Subpart YYYYYY shows which parts of the General Provisions in 40 CFR 63.1-63.16 apply. |
| o. | 40 CFR Part 64 (40 CFR 64.1 – 64.10) [Compliance Assurance Monitoring (CAM)] | See c)(1), d)(1), d)(2), d)(4)a., d)(4)b., d)(5) through d)(9), e)(1), e)(4) and f)(2). |

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements under ORC 3704.03(T) for this emissions unit shall be demonstrated by:
 - i. For PM₁₀ and PM_{2.5} emissions, compliance with terms b)(2)b. and c)(1)
 - ii. For NO_x, compliance with the tons/month limitation.
 - iii. For SO₂, compliance with term c)(5).
- b. The PM₁₀ and PM_{2.5} emissions from this emissions unit shall be collected and controlled by the meltshop building evacuation system with fume collection hoods and a Direct Evacuation Control (DEC) system on the EAF, all exhausting to a baghouse (BHC-1).
- c. Emissions units P103, P115, P117, P119, P120, P121, P901, and P902 also exhaust to baghouse BHC-1 and are typically in operation during the operation of this emissions unit. Therefore the emissions limitations specified for P102 in section b)(1) is a combined limit which includes the emissions from all these EUs.
- d. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- e. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.
- f. These emissions limitations take into account the voluntary restrictions as proposed by the permittee for the purpose of establishing practically and legally



enforceable limitations representing the potential to emit for point source emissions of Hg exhausting from the Meltshop baghouse. Compliance with the Hg emissions limitation shall be assumed provided the permittee complies with the 40 CFR Part 63, Subpart YYYYYY applicable requirements.

- g. The allowable Fluoride emissions limitations are required to satisfy the basis of the air dispersion modeling summarized in terms d)(14) – d(17).
- h. The permittee shall employ "Best Available Control Technology" (BACT) for controlling emissions of CO and VOC. BACT for this emissions unit has been determined to be the following:
 - i. CO – Use of a Direct Evacuation Control (DEC) system on the EAF with adjustable air gap, elbow, and water cooled ductwork for enhanced burnout of CO. Acceptance of an emissions limitation of 3.5 lbs/ton of steel produced.
 - ii. VOC – The development, maintenance, and process operations under a Scrap Management Plan (SMP) consistent with terms c)(6)-(8) and below that achieves a maximum emissions rate of 0.170 lb/ton of steel produced.

The emissions limits based on the BACT requirements are listed in b)(1)a. above.

- i. The scrap metals processed in this emissions unit are restricted to only those materials that comply with the Scrap Management Plan (SMP) described in c)(6) and c)(7).
- j. Rolling average restrictions for PM and PM_{2.5} emissions to avoid exceeding NSR significance levels are not required because the PM₁₀ restrictions are more stringent based on the emissions factors in lb/ton set forth in section f)(1)a. through f)(1)c.

c) **Operational Restrictions**

- (1) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation. The capture system shall be designed and operated such that all emissions are captured and ducted to the baghouse.

[Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 60, Subpart AAa, 40 CFR 63.10686(a), 40 CFR Part 64, and Administrative Permit Modification to P0104388 to be issued]

- (2) The annual molten steel production from Emissions Unit P102 shall not exceed 1,300,000 tons based upon a rolling, 12-month summation of the molten steel production rates.

[Authority for term: OAC rule 3745-77-07(A)(1) and Administrative Permit Modification to P0104388 to be issued]



- (3) The burning of used tires as a substitute for coke in the Electric Arc Furnaces is expected to increase SO₂ emissions. Accordingly, the annual combined quantity of used tires burned at the Faircrest Steel Plant (in P102) and the Harrison Steel Plant (in P258 and P292) shall not exceed 12,930 tons/yr based upon a rolling, 12-month summation of the weight of tires burned.

[Authority for term: OAC rule 3745-77-07(A)(1) and Administrative Permit Modification to P0104388 to be issued]

- (4) The rolling, 12-month summation of the combined SO₂ emissions from the EAF's at the Harrison Steel Plant (HSP) and the Faircrest Steel Plant (FSP) shall not exceed 419 tons as calculated from the combined monthly sums of items a.i.(a), a.ii.(a), b.i.(a), b.ii.(a), c.i.(a), and c.ii.(a) below:

- a. P258 at HSP
 - i. SO₂ emissions without tire burning
 - (a) $0.07 \text{ lb SO}_2/\text{ton steel} \times \text{tons steel/month} \times 1\text{ton SO}_2/2000 \text{ lb SO}_2$
 - ii. SO₂ emissions with tire burning
 - (a) $0.44 \text{ lb SO}_2/\text{ton steel} \times \text{tons steel/month} \times 1\text{ton SO}_2/2000 \text{ lb SO}_2$
- b. P292 at HSP
 - i. SO₂ emissions without tire burning
 - (a) $0.07 \text{ lb SO}_2/\text{ton steel} \times \text{tons steel/month} \times 1\text{ton SO}_2/2000 \text{ lb SO}_2$
 - ii. SO₂ emissions with tire burning
 - (a) $0.44 \text{ lb SO}_2/\text{ton steel} \times \text{tons steel/month} \times 1\text{ton SO}_2/2000 \text{ lb SO}_2$
- c. P102 at FSP
 - i. SO₂ emissions without tire burning
 - (a) $0.15 \text{ lb SO}_2/\text{ton steel} \times \text{tons steel/month} \times 1\text{ton SO}_2/2000 \text{ lb/S}$
 - ii. SO₂ emissions with tire burning
 - (a) $0.52 \text{ lb SO}_2/\text{ton steel} \times \text{tons steel/month} \times 1\text{ton SO}_2/2000 \text{ lb/S}$

[Authority for term: OAC rule 3745-77-07(A)(1) and Administrative Permit Modification to P0104388 to be issued]

- (5) Sulfur shall not be added to this Electric Arc Furnace.

[Authority for term: OAC rule 3745-77-07(A)(1) and Administrative Permit Modification to P0104388 to be issued]

- (6) For control of chlorinated plastic, lead, and free organic liquid contaminants in the metallic scrap utilized in the EAFs, the permittee shall comply with the following applicable requirements identified in 40 CFR 63 Subpart YYYYYY:

| Applicable Rule | Requirement |
|-----------------|--|
| 63.10685(a)(1) | Implement and maintain a pollution prevention plan for metallic scrap selection and inspection, generally called a Scrap Management Plan (SMP) |
| 63.10685(a)(2) | Restrictions on contaminants in metallic scrap charged to the EAFs |

- (7) For control of mercury contaminants in the metallic scrap utilized in the EAFs, the permittee shall comply with the following applicable requirements identified in 40 CFR 63 Subpart YYYYYY:

| Applicable Rule | Requirement |
|-----------------|--|
| 63.10685(b)(1) | Implement and maintain a site specific plan for the removal of mercury switches as part of the Scrap Management Plan (SMP) |
| 63.10685(b)(2) | Participate in and purchase motor vehicle scrap only from providers who participate in an approved mercury removal program |
| 63.10685(b)(3) | Documentation requirements for motor vehicle scrap materials recovered for their specialty alloy content only |
| 63.10685(b)(4) | Documentation requirements for non-motor vehicle scrap |

- (8) As part of the Scrap Management Plan (SMP), the permittee shall install 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.

[Authority for term: OAC rule 3745-77-07(A)(1) and Administrative Permit Modification to P0104388 to be issued]

- (9) The emission factors in section f)(1), expressed in lb/ton, are derived from emissions data obtained from stack testing during trial runs at the Faircrest Steel Plant while adding used tires to the EAF charge at the average rate of 2000 lbs tires/150 tons steel per hour, or 13.3 lbs tires/ ton steel. Therefore the tire addition rate to P102 shall not exceed 13.3 lbs tires/ ton steel x 200 tons steel/hr* = 2660 lb tires/hr.

* maximum rated hourly capacity of EAF P102.

[Authority for term: OAC rule 3745-77-07(A)(1) and Administrative Permit Modification to P0104388 to be issued]

d) Monitoring and/or Recordkeeping Requirements

- (1) Pursuant to 40 CFR 60.273a(c), a continuous opacity monitoring system (COMS) is not required on this EAF since observations of the opacity of the visible emissions from the meltshop baghouse shall be performed by a certified visible emission observer as follows:

Visible emission observations shall be conducted at least once per day for at least three 6-minute periods when the furnace is operating in the meltdown and refining period. All visible emissions observations shall be conducted in accordance with Method 9. If visible emissions occur from more than one point, the opacity shall be recorded for any points where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In that case, the 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. The permittee shall maintain copies of all daily opacity observations.

[Authority for Term: OAC rule 3745-77-07(C)(1); 40 CFR Part 60.273a(c); 40 CFR Part 64; and Administrative Permit Modification to P0104388 to be issued]

- (2) Pursuant to 40 CFR 60.273a(d), a furnace static pressure monitoring device is not required on this EAF equipped with a DEC system since observations of the opacity of the visible emissions from the melt shop shall be performed by a certified visible emission observer as follows:

Shop opacity observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9. Shop opacity shall be recorded for any point(s) where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. The permittee shall maintain copies of all daily opacity observations.

[Authority for Term: OAC rule 3745-77-07(C)(1); 40 CFR Part 60.273a(d); 40 CFR Part 64; and Administrative Permit Modification to P0104388 to be issued]

- (3) The permittee shall maintain records to identify the persons responsible for conducting the opacity readings and to verify that their Method 9 certifications are valid.

[Authority for Term: OAC rule 3745-77-07(C)(1) and Administrative Permit Modification to P0104388 to be issued]

- (4) The permittee shall monitor the operation of the furnace control systems and maintain records in accordance with the following requirements:

a. Pursuant to 40 CFR 60.274a(b), the permittee shall either:

- i. check and record the control system fan motor amperes and damper position on a once-per-shift basis;
- ii. install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood; or
- iii. install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet and check and record damper positions on a once-per-shift basis.

The monitoring device(s) may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow rate monitoring device(s) shall have an accuracy of ± 10 percent over its normal operating range and shall be calibrated according to the manufacturer's instructions. If required, the permittee shall demonstrate the accuracy of the monitoring devices relative to Methods 1 and 2 of Appendix A of 40 CFR, Part 60.

[Authority for Term: OAC rule 3745-77-07(C)(1); 40 CFR Part 60.274a(b); 40 CFR Part 64; and Administrative Permit Modification to P0104388 to be issued]

- b. Pursuant to 40 CFR 60.274a(c), during all periods in which a hood is operated for the purpose of capturing emissions from the EAF, the permittee shall maintain, at the appropriate levels established during the most recent emission test that demonstrated that the emissions unit was in compliance, either:
 - i. the control system fan motor amperes and all damper positions [during emission test on XX/XX/XXXX, fan amps ranged from XXX to XXX amps and damper position ranged from YY to YY % open];
 - ii. the volumetric flow rate through each separately ducted hood; or
 - iii. the volumetric flow rate at the control device inlet and all damper positions.

The permittee may petition the Ohio EPA for reestablishment of these parameters whenever the permittee can demonstrate to the Agency's satisfaction that the affected facility operating conditions upon which the parameters were previously established are no longer applicable.

[Authority for Term: OAC rule 3745-77-07(C)(1); 40 CFR Part 60.274a(c); and Administrative Permit Modification to P0104388 to be issued]

- c. Pursuant to 40 CFR 60.274a(d), 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.

[Authority for Term: OAC rule 3745-77-07(C)(1); 40 CFR Part 60.274a(d); and Administrative Permit Modification to P0104388 to be issued]

- d. Pursuant to 40 CFR 60.274a(e), the Permittee may petition the U.S. EPA to approve any alternative to either the monitoring requirements specified in (4)a. above or the monthly operational status inspections specified in (4)c. above, if the alternative will provide a continuous record of operation of each emission capture system.

[Authority for Term: OAC rule 3745-77-07(C)(1); 40 CFR Part 60.274a(e); and Administrative Permit Modification to P0104388 to be issued]

- (5) The acceptable range for the pressure drop across the baghouse shall be 3.0 to 13.0 inches water gauge.

The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a once per shift basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:



- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification to this PTI or a minor permit modification to the TV permit.

[Authority for Term: OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and Administrative Permit Modification to P0104388 to be issued]

- (6) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for the baghouse controlling this emissions units are:
 - a. the fan motor amperage of the fans exhausting the baghouse with an indicator level and monitoring frequency in accordance with the monitoring and recordkeeping requirements specified in d)(4)a. and d)(4)b.;
 - b. the opacity of visible emissions from the baghouse stacks with an indicator level of the limitation specified in b)(1)k. and monitoring frequency in accordance with the monitoring and recordkeeping requirements specified in d)(1); and
 - c. the opacity of visible fugitive emissions from the meltshop egress points with an indicator level of the limitation specified in b)(1)k. and monitoring frequency in accordance with the monitoring and recordkeeping requirements specified in d)(2).

The CAM performance indicators are indicative of the operation of the baghouse and capture system and were chosen as a reasonable and practical monitoring frequency. The CAM performance indicator values were established in accordance with the facility recommendations and will be verified and/or adjusted during future emissions testing performed as required by this permit.

When a performance indicator shows operation outside the indicator range, the permittee shall take corrective actions to restore operation of the emissions unit(s) and/or control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operation(s) returned to normal without operator action, or any necessary follow-up actions to return operation to within the indicator range. The emissions unit(s) and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The baghouse(s) shall not be configured to have bypass capability.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8. In addition, a QIP will be developed and implemented if the threshold of one occurrence per quarter is exceeded.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (7) Baghouse operating parameters shall be re-verified as a result of any changes to the operating conditions of the baghouses or emissions units. In addition to periodic monitoring of the baghouse operating parameters, the permittee shall also have an Operating, Maintenance, and Inspection (OM&I) program for the baghouses and capture system, including but not limited to:
- a. Checking the bags/filters for deterioration or degradation;
 - b. Checking the cleaning system for proper operation; and
 - c. Checking the hoppers and conveyance systems for proper operation.

Based on the results of the (OM&I) program, repairs to the baghouses and capture system shall be made as needed. If the current CAM indicators and/or the baghouse and capture system (OM&I) program is considered inadequate, the permittee shall develop a Quality Improvement Plan.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (8) The permittee shall maintain necessary parts for routine repairs of the monitoring equipment.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR 64.7(b)]

- (9) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring under 40 CFR Part 64 did not provide an indication of an excursion or exceedance, or the results of compliance or performance testing document a need to modify the existing indicator levels, the permittee shall

promptly notify Canton City Health Department, Air Pollution Control Division, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions (i.e. levels), modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. Approved revisions to the monitoring will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by a means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

- (10) The permittee shall maintain daily records of:
- a. the time, duration, and weight of each charge;
 - b. the time, duration, and weight of each tap, in tons;
 - c. the time interval for each tap to tap cycle; and
 - d. the hourly tap to tap (tons/hr) for each tap.

[Authority for Term: OAC rule 3745-77-07(C)(1) and Administrative Permit Modification to P0104388 to be issued]

- (11) The permittee shall calculate and record daily the total weight of tires added per ton of steel for each EAF tap to tap cycle and the total weight of tires added per hour.

[Authority for Term: OAC rule 3745-77-07(C)(1) and Administrative Permit Modification to P0104388 to be issued]

- (12) The permittee shall maintain monthly records of the following information:
- a. the molten steel production rate for each month without tire burning;
 - b. the molten steel production rate for each month with tire burning;
 - c. the rolling, 12-month summation of the molten steel production rates;
 - d. the combined weight of tires burned in P102, P258, and P292 for each month;
 - e. the rolling, 12-month summation of the tires burned in P102, P258, and P292;
 - f. the combined SO₂ emissions from P102, P258, and P292 for each month; and
 - g. the rolling, 12-month summation of the combined SO₂ emissions from P102, P258, and P292.

[Authority for Term: OAC rule 3745-77-07(C)(1) and Administrative Permit Modification to P0104388 to be issued]



- (13) The permittee shall comply with the recordkeeping requirements for the control of contaminants from scrap pursuant to 40 CFR 63 Subpart YYYYYY, Section 63.10685(c); 63.10685(c)(1)(i); and 63.10685(c)(2)

- (14) The Permit to Install (PTI) application for this emissions unit, P102, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration results from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
 - a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
 - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X"= 24 hours per day and "Y" = 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):
$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$
 - d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year):

Toxic Contaminant: Fluoride



TLV (ug/m3): 2500

Maximum Hourly Emission Rate (lbs/hr): 1.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1.5

MAGLC (ug/m3): 59.5

Predicted 30-day average Maximum Ground-Level Concentration (ug/m3): 0.27
(defined as 0.18 x the Predicted 1-Hour Maximum Ground-Level Concentration)

Maximum Acceptable 30-day average ground-level Concentration (ug/m3): 0.50

The permittee, has demonstrated that emissions of fluoride, from emissions unit P102, is calculated to be less than eighty per cent of the Maximum Acceptable Ground-Level concentration (MAGLC) and less than the Maximum Acceptable 30-Day Average Ground-Level Concentration. Any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[Authority for Term: ORC 3704.03(F)(3)(c) and F(4); OAC rules 3745-114-01 and 3745-77-07(C)(1); and Administrative Permit Modification to P0104388 to be issued]

- (15) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted maximum ground-level concentrations, the permittee shall re-model the change(s) to demonstrate that the MAGLC's have not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour and 30-day average maximum ground-level concentrations include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in

greater emissions than the emissions rate modeled to determine the ground-level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[Authority for Term: ORC 3704.03(F)(3)(c) and F(4); OAC rules 3745-114-01 and 3745-77-07(C)(1); and Administrative Permit Modification to P0104388 to be issued]

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

[Authority for Term: ORC 3704.03(F)(3)(c) and F(4); OAC rules 3745-114-01 and 3745-77-07(C)(1); and Administrative Permit Modification to P0104388 to be issued]

e) **Reporting Requirements**

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify, at a minimum:
- a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range specified in d)(5);



- b. each period of time (start time and date, and end time and date) when recorded motor amperage(s) of the fans exhausting the baghouse and fan damper positions were outside of the acceptable range(s) specified in d)(4);
- c. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse;
- d. each incident of deviation described in "a", "b", and/or "c" (above) where a prompt investigation was not conducted;
- e. each incident of deviation described in "a" or "b" where prompt corrective action, that would bring the specified parameters into compliance with the acceptable range, was determined to be necessary and was not taken;
- f. each incident of deviation described in "a" and "b" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit;
- g. all exceedances of the rolling 12-month summation of the molten steel production rate;
- h. all exceedances of the rolling 12-month summation of the weight of tires burned; and
- i. all exceedances of the rolling 12-month summation of the combined SO₂ emissions from P258, P292, and P102; and
- j. all instances when any portion of the Scrap Management Plan was not followed or the information required to be documented was not recorded.

[Authority for Term: OAC rules 3745-77-07(A)(3)(c) and 3745-15-03(C); 40 CFR Part 60 Subpart AAa; and 40 CFR Part 64.9(a)]

- (2) The permittee shall submit semi-annual deviation (excursion) reports that identify, at a minimum:
 - a. all exceedances of the visible particulate emission limit for the fabric filter control device. For the purpose of these reports, an exceedance is defined as any six-minute period during which the average opacity is three percent or greater; and
 - b. all exceedances of the fugitive visible particulate emission limit for the melt shop. For the purpose of these reports, an exceedance is defined as any six-minute period during which the average opacity is six percent or greater.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 60 Subpart AAa]

- (3) A departure from the CAM performance indicators described in sections d)(4) and d)(5) shall be considered an excursion as defined in 40 CFR Part 64.1. If the Permittee has taken corrective actions to restore operation of the emissions unit(s) and/or control

equipment to its normal operation, then the departure is not considered a deviation and shall be reported as an excursion.

- (4) The permittee shall submit annual reports that include any changes to any parameter or value used in the dispersion model used to demonstrate compliance with the "Toxic Air Contaminate Statute", ORC 3704.03(F), through the predicted 1 hour maximum concentration. The report should include:
- a. the original model input;
 - b. the updated model input;
 - c. the reason for the change(s) to the input parameter(s); and
 - d. a summary of the results of the updated modeling, including the input changes; and
 - e. a statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of the MAGLC.

If no changes to the emissions, emissions unit(s), or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

[Authority for Term: ORC 3704.03(F)(3)(c) and F(4); OAC rules 3745-114-01 and 3745-77-07(C)(1); and Administrative Permit Modification to P0104388 to be issued]

- (5) The permittee shall comply with the reporting requirements pursuant to 40 CFR Part 60, Subpart A section 60.7.
- (6) The permittee shall comply with the reporting requirements for the control of contaminants from scrap pursuant to 40 CFR 63 Subpart YYYYYY, Section 63.10685(a)(1), 63.10685(c)(1)(ii) and 63.10685(c)(3)
- (7) If the permittee is required under 40 CFR Part 64.8 and d)(6) of this permit to develop a QIP, the permittee shall submit quarterly reports that contain a description of the actions taken to implement a QIP during the reporting period. Upon completion of a QIP, the permittee shall include documentation that the implementation of the plan has been completed and reduced the likelihood of excursions.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (8) All reports shall be submitted in accordance with the reporting requirements of Part A: Standard Terms and Conditions of this permit. Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

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



f) Testing Requirements

(1) Compliance with the emission limitations and/or control requirements specified in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Filterable PM₁₀ Emission Limitation:

Filterable PM₁₀ emissions shall not exceed 4.117 tons/month averaged over a 12-month rolling period.

Applicable Compliance Method:

Two stack tests at FSP were compared as shown below: one test while burning tires, another without tires. An increase in PM emissions was seen in the tire-burn test. However, because the stack tests both demonstrate PM emissions which are significantly less than the 0.125 lb/ton limit allowed under the previous permit (PTI 15-01339), the post project allowable PM emissions has been reduced to 0.10 lb/ton as requested by the permittee.

PM from Apr - 2006 tire test-burn at FSP, Table 3, Run 2, (highest PM with tires)
0.042 lb/ton

PM from May - 2008 stack test at FSP, Table 1, Run 3, (lowest value, no tires)
0.007 lb/ton

PM₁₀ is assumed to be 76% of PM from AP-42, Table 12.5-2, pg. 12.5-19.

Post Project Allowable PM₁₀ with tires:

$$PM_{10} = PM \times 0.76 = 0.10 \text{ lb/ton} \times 0.76 = 0.076 \text{ Lb/ton}$$

Compliance shall be demonstrated per the testing required in term f)(2).

0.076 lb/ton emission factor was converted to a tons/month emission limitation using the maximum annual production capacity of the EAF in tons steel/yr listed in term c)(2) as shown in the following equation:

$$\frac{0.076 \text{ lb PM}_{10}}{\text{ton steel}} \times \frac{1,300,000 \text{ ton steel}}{\text{yr}} \times \frac{\text{ton PM}_{10}}{2000 \text{ lb PM}_{10}} \times \frac{\text{yr}}{12 \text{ mos}} = 4.117 \text{ tons/mo PM}_{10}$$

Compliance with the monthly PM₁₀ emissions limitation is demonstrated by multiplying the PM₁₀ emissions factor of 0.076 lb PM₁₀/ton steel by the 12-month rolling sum for molten steel production, in tons, from the recordkeeping section [term d)(12)c], and dividing by 12 months/yr.

b. PM_{2.5} Emission Limitation:

Filterable PM_{2.5} emissions shall not exceed 2.167 tons/month averaged over a 12-month rolling period.



Applicable Compliance Method:

PM_{2.5} is assumed to be 40% of PM as requested by the permittee and to be verified by post project stack testing.

Post Project Allowable PM_{2.5} with tires:

$$PM_{2.5} = PM \times 0.40 = 0.10 \text{ lb/ton} \times 0.40 = 0.040 \text{ Lb/ton}$$

Compliance shall be demonstrated per the testing required in term f)(2).

0.040 lb/ton emission factor was converted to a tons/month emission limitation using the maximum annual production capacity of the EAF in tons steel/yr listed in term c)(2) as shown in the following equation:

$$\frac{0.040 \text{ lb PM}_{2.5}}{\text{ton steel}} \times \frac{1,300,000 \text{ ton steel}}{\text{yr}} \times \frac{\text{ton PM}_{2.5}}{2000 \text{ lb PM}_{2.5}} \times \frac{\text{yr}}{12 \text{ mos}} = 2.167 \text{ tons/mo PM}_{2.5}$$

Compliance with the monthly PM_{2.5} emissions limitation is demonstrated by multiplying the PM_{2.5} emissions factor of 0.04 lb PM_{2.5}/ton steel by the 12-month rolling sum for molten steel production, in tons, from the recordkeeping section [term d)(12)c], and dividing by 12 months/yr.

c. Emission Limitation (NOx):

NOx emissions shall not exceed 10.833 tons/month averaged over a 12-month rolling period.

Applicable Compliance Method:

Stack test results from a test-burn at FSP in 4-2006 with and without tires showed a NOx increase when burning tires. This Δ NOx at FSP was added to the existing PTI 15-01339 allowable to determine the new allowable EF for tire burning in the HSP EAF as follows:

| | |
|---|-------------|
| NOx from 4-2006 tire test burn at FSP, Table 2, Run1 (highest NOx with tires) | 0.15 lb/ton |
| NOx from 4-2006 tire test burn at FSP, Table 2, Run 3 (no tires) - <u>0.12 lb/ton</u> | |
| Δ NOx (worst case) | 0.03 lb/ton |
| NOx allowable from current PTI 15-01339 | 0.20 lb/ton |

Because both test runs show NOx emissions close to, but not exceeding, the current PTI allowable of 0.20 lb/ton, the post project allowable NOx emissions will be kept the same as the current PTI 15-01339 allowable:

0.20 lb/ton

Compliance shall be demonstrated per the testing required in term f)(2).



0.20 lb/ton emission factor was converted to a tons/month emission limitation using the maximum annual production capacity of the EAF in tons steel/yr listed in term c)(2) as shown in the following equation:

$$\frac{0.20 \text{ lb NOx}}{\text{ton steel}} \times \frac{1,300,000 \text{ ton steel}}{\text{yr}} \times \frac{\text{ton NOx}}{2000 \text{ lb NOx}} \times \frac{\text{yr}}{12 \text{ mos}} = 10.833 \text{ tons/mo NOx}$$

Compliance with the monthly NOx emissions limitation is demonstrated by multiplying the NOx emissions factor of 0.20 lb NOx /ton steel by the 12-month rolling sum for molten steel production, in tons, from the recordkeeping section [term d)(12)c], and dividing by 12 months/yr.

d. Emission Limitation (CO):

3.5 lb CO/ ton steel

Applicable Compliance Method:

Results from several stack tests done from 1992 to 2006 showed average CO emissions range from 0.97 lb/ton to 4.8 lbs/ton with no burning of tires. Testing done on 4-2006 while burning tires showed CO emissions of 2.5 lbs/ton and 1.79 lbs/ton (Runs 1 and 2, Table 2 of test report). These values indicate that the allowable CO emissions rate of 4.8 lb/ton established in PTI 15-01339 can be reduced. Since the tire test burn results show no clear conclusion on the effect of tire burning on CO emissions, and past stack tests without tire burning show average CO emissions of 3.2 lbs/ton, it was decided to apply a 40% margin to the worst case CO emissions of 2.5 lbs/ton when burning tires to set the new allowable CO emissions at 3.5 lb/ton.

Compliance shall be demonstrated per the testing required in term f)(2).

e. Emission Limitation (SO₂):

SO₂ emissions shall not exceed 28.167 tons/month averaged over a 12-month rolling period

Applicable Compliance Method:

Stack test results from a test-burn at FSP in 4-2006 with and without tires showed an SO₂ increase when burning tires. This Δ SO₂ at FSP was added to the existing PTI 15-01339 allowable to determine the new allowable EF for tire burning in the HSP EAF.

SO₂ from 4-2006 tire test burn at FSP, Table 2, Run1 (highest SO₂ with tires) 0.51 lb/ton

SO₂ from 4- 2006 tire test burn at FSP Table 2, Run 3 (no tires) - 0.14 lb/ton

Δ SO₂ (worst case) 0.37 lb/ton

SO₂ allowable from current PTI 15-01339 0.15 lb/ton



Δ SO₂ (worst case) + 0.37 lb/ton

Post Project Allowable SO₂ with tires 0.52 lb/ton

Compliance shall be demonstrated per the testing required in term f)(2).

0.52 lb/ton emission factor was converted to a tons/month emission limitation using the maximum annual production capacity of the EAF in tons steel/yr listed in term c)(2) as shown in the following equation:

$$\frac{0.52 \text{ lb SO}_2}{\text{ton steel}} \times \frac{1,300,000 \text{ ton steel}}{\text{yr}} \times \frac{\text{ton SO}_2}{2000 \text{ lb SO}_2} \times \frac{\text{yr}}{12 \text{ mos}} = 28.167 \text{ tons/mo SO}_2$$

Compliance with the monthly SO₂ emissions limitation is demonstrated by multiplying the SO₂ emissions factor of 0.52 lb SO₂/ton steel by the 12-month rolling sum for molten steel production, in tons, from the recordkeeping section [term d)(12)c], and dividing by 12 months/yr.

f. Emission Limitation(VOC):

0.17 lb VOC/ ton steel

Applicable Compliance Method:

Stack test results from a test-burn at FSP in 4-2006 with and without tires showed a VOC increase when burning tires. This Δ in VOC was added to the existing PTI 15-01339 allowable to determine the new allowable EF for tire burning in the HSP EAF as follows:

VOC from 4-2006 tire test burn at FSP, Table 2, Run1 (highest VOC with tires)
0.09 lb/ton

VOC from 4- 2006 tire test burn at FSP Table 2, Run 3 (no tires) - 0.02 lb/ton

Δ VOC (worst case) 0.07 lb/ton

VOC allowable from current PTI 15-01339 0.10 lb/ton

Δ VOC (worst case) + 0.07 lb/ton

Post Project Allowable VOC with tires: 0.17 lb/ton

Compliance shall be demonstrated per the testing required in term f)(2).

g. Emission Limitation (Pb):

Lead (Pb) emissions shall not exceed 0.054 tons/month averaged over a 12-month rolling period.



Applicable Compliance Method:

Stack test results from a test-burn at FSP in 4-2006 with and without tires showed a negligible increase in Pb emissions when burning tires as follows:

Pb from 4-2006 tire-test burn at FSP, Table 3, Run1 (highest Pb with tires) 0.000048 lb/ton

Pb from 4-2006 tire test burn at FSP, Table 3, Run 3 (no tires) 0.000045 lb/ton

Δ Pb (worst case) Negligible 0.000003 lb/ton

Pb allowable from current PTI 15-01339 0.0013 lb/ton

Δ Pb (worst case) Negligible (0.000003) 0.0000 lb/ton

Post Project Allowable PM with tires (unadjusted)* 0.0013 lb/ton

*Since the facility has accepted a post project reduction in their current allowable PM emissions from 0.125 lb/ton to 0.10 lb/ton, a corresponding reduction in Pb emissions is expected as follows:

$$0.0013 \text{ lb Pb/ton} \times 0.10 \text{ lb PM/ton} = 0.0010 \text{ lb Pb/ton}$$

Post Project Allowable PM with tires (adjusted): 0.0010 lb/ton

Compliance shall be demonstrated per the testing required in term f)(2).

0.0010 lb/ton emission factor was converted to a tons/month emission limitation using the maximum annual production capacity of the EAF in tons steel/yr listed in term c)(2) as shown in the following equation:

$$\frac{0.0010 \text{ lb Pb}}{\text{ton steel}} \times \frac{1,300,000 \text{ ton steel}}{\text{yr}} \times \frac{\text{ton Pb}}{2000 \text{ lb Pb}} \times \frac{\text{yr}}{12 \text{ mos}} = 0.054 \text{ tons/mo Pb}$$

Compliance with the monthly Pb emissions limitation is demonstrated by multiplying the Pbemissions factor of 0.001 lb Pb /ton steel by the 12-month rolling sum for molten steel production, in tons, from the recordkeeping section [term d)(12)c], and dividing by 12 months/yr.

h. Emission Limitation (Hg):

Mercury (Hg) emissions shall not exceed 0.0000185 lb/ton

Applicable Compliance Method:

The voluntary allowable emissions factor of 0.0000185 lb/ton is the same as used in the previous PTI 15-01339. The proposed used tire feedstock contains no Hg, and consequently the burning of tires is not expected to affect the emissions factor. The permittee shall maintain a scrap management plan to



control the presence of Hg in the scrap received per the requirements in term c)(7).

Compliance shall be demonstrated per the testing required in term f)(2).

i. Emission Limitation (Fluoride):

Fluoride emissions shall not exceed 0.007 lb/ton

Applicable Compliance Method:

Burning of tires is not expected to affect the hourly fluoride emissions rate. Therefore the allowable emissions factor of 0.007 lb/ton is the same as used in the previous PTI 15-01339.

A typical analysis of scrap tires (without wire) has a fluoride (F) content of 0.0010 % by weight. Assuming the worst case where all the F in the fuel analysis is exhausted to the baghouse and the maximum allowable quantity of tires is charged (838 lb tires/hr), the maximum F emissions with the EAF operating at 200 tph are:

$$\text{Fluoride emissions} = \frac{0.001 \text{ lb F} / 100 \text{ lb tires} \times 838 \text{ lb tires/hr}}{200 \text{ ton/hr}} = 0.00004 \text{ lb F} / \text{ton}$$

The baghouse efficiency for Fluoride capture was 99.57 % during a 4-15,16-2002 stack test at FSP.

Conservatively assuming a baghouse efficiency of 99.5 % for Fluoride capture, the additional outlet loading for F leaving the baghouse from F in the tires is:

$$0.00004 \text{ lb F/ton} \times (1 - 0.995) = 0.00000002 \text{ lb F/ton hr, which is negligible compared to the allowable rate of 0.007 lb F/ton.}$$

Compliance shall be demonstrated per the testing required in term f)(2).

j. Emission Limitation:

The 58.51 lb/hr particulate emission (PE) limitation specified by this rule is less stringent than the PM₁₀ emissions limitation established pursuant to OAC rule 3745-31-05(D) (4.117 tons/month).

Applicable Compliance Method:

The allowable rate of particulate emissions E is calculated from the formula given in Table I in the Appendix of OAC rule 3745-17-11 using a process weight rate P of 200 tons steel per hour as follows:

$$E = 55.0(P)^{0.11} - 40.0 = 55.0(200)^{0.11} - 40.0 = 58.51 \text{ lb/hr PE}$$



The 4.117 tons PM₁₀/month is converted to lbs PM₁₀/hr using the maximum annual production capacity of the EAF in tons steel/yr listed in term c)(2) as shown in the following equation:

$$\frac{4.117 \text{ tons PM}_{10}}{\text{month}} \times \frac{12 \text{ months}}{\text{yr}} \times \frac{1,300,000 \text{ tons steel}}{\text{yr}} \times \frac{200 \text{ tons steel}}{\text{hr}} \times \frac{2000 \text{ lb}}{\text{ton}} = 15.2 \text{ lb PM}_{10}/\text{hr}$$

15.2 lb PM₁₀/hr was converted to PE using the information from f)(1)a:

$$15.2 = 0.76(\text{PE}); \text{ solve for PE} = 15.2 \div 0.76 = 20 \text{ lb PE/hr} < 58.51 \text{ lb/hr}$$

k. Emission Limitation:

CO emissions shall not exceed 700 lbs/hr, and 2275 tons per year

VOC emissions shall not exceed 34 lbs/hr, and 110.5 tons per year

Mercury (Hg) emissions shall not exceed 0.0037 lb/hr and 0.012 tons per year

Fluoride emissions shall not exceed 1.4 lb/hr and 4.6 tpy

Applicable Compliance Method:

Compliance with each hourly emission limitation is demonstrated by multiplying the applicable allowable emissions factor from f)(1)e. through f)(1)j., in lb/ton steel, by the maximum capacity of the EAF (200 tons steel/hr).

Each annual limitation was established by multiplying the applicable allowable emissions factor from f)(1)e. through f)(1)j., in lb/ton steel, by the maximum annual production capacity of the EAF in tons steel/yr listed in term c)(2) and dividing by a conversion factor of 2000 lb/ton. Therefore compliance with the applicable allowable emission factor from f)(1)e. through f)(1)j. demonstrates compliance with the corresponding annual emission limitation.

l. Emission Limitation:

Filterable PM₁₀ emissions shall not exceed 49.4 tons/yr averaged over a 12-month rolling period.

Applicable Compliance Method:

Compliance with the annual PM₁₀ emissions limitation is demonstrated by multiplying the PM₁₀ emissions factor of 0.76 lb PM₁₀/ton steel by the 12-month rolling sum for molten steel production, in tons, from the recordkeeping section [term d)(12)c].

m. Emission Limitation:

SO₂ emissions from Emission Units P102, P258, and P292 combined shall not exceed 419 tons/yr as a rolling, 12-month summation.



Applicable Compliance Method:

Compliance with the annual combined SO₂ limitation is demonstrated by the records required in section d)(12)g.

n. Emission Limitation:

0.0052 gr/dscf of particulate emissions

Applicable Compliance Method:

Compliance with the 0.0052 gr/dscf of the particulate emissions (PM) limitation is demonstrated by converting the PM₁₀ emissions limitation of 0.076 lb PM₁₀/ton steel to gr/dscf as follows:

$$\frac{0.076 \text{ lb PM}_{10}}{\text{ton steel}} \times \frac{200 \text{ ton steel}}{\text{hr}} \times \frac{7000 \text{ gr}}{\text{lb PM}_{10}} \times \frac{\text{min}}{1,007,761 \text{ dscf}} \times \frac{\text{hr}}{60 \text{ min}} = 0.00176 \text{ gr/dscf}$$

where 1,007,761 dscf/min is the baghouse exhaust gas flow rate.

Since $PM_{10} = 0.76 \times PM$,

$$PM = \frac{PM_{10}}{0.76} = \frac{0.00176 \text{ gr/dscf}}{0.76} = 0.0023 \text{ gr/dscf,}$$

which is less than the 0.0052 gr/dscf. PM limitation.

o. Emission Limitation:

Visible particulate emissions from the baghouse shall not exceed 3% opacity. Visible particulate emissions of fugitive dust shall not exceed 6% opacity from the melt shop area and 10% opacity from the associated dust handling equipment.

Applicable Compliance Method:

Compliance shall be demonstrated per the testing required in term f)(2). Compliance with the allowable visible emissions limitations shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9. The points of observation for visible emissions of fugitive dust determination shall include all non-stack egress points from the building housing the emissions units. Such points include, but are not limited to, doorways, windows, and roof monitors.

[Authority for Term: OAC rule 3745-77-07(C)(1) and Administrative Permit Modification to P0104388 to be issued]

- (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 (following the effective date for the Title V permit) and within 6 months prior to the permit expiration.



- i. Portions of the results of stack testing done on 4-14-2015 to 4-16-2015 in response to US EPA's "Request to Provide Information Pursuant to the Clean Air Act", mailed on 12-29-2014, can be utilized as applicable to satisfy these stack test requirements, provided such testing is done no later than 6 months after issuance of this permit.

- b. The test results shall be based on the arithmetical average of three (3) consecutive test runs. The sampling time for each test run shall include an integral number of heats. If the facility's production schedule cannot accommodate performing (3) consecutive runs, (3) complete test runs performed no more than (30) days apart shall be acceptable.

- c. The emission testing shall be conducted to demonstrate compliance with the allowable emission factors in lbs/ton each, listed in f)(1), for emissions of Filterable PM₁₀, Filterable PM_{2.5}, NO_x, CO, SO₂, VOC, Pb, Hg, and Fluoride, to demonstrate compliance with the visible emissions limitations in b)(1), and to demonstrate the exhaust gas flow rate of the baghouse in dscfm.

- d. The following test methods found in 40 CFR Part 60, Appendix A shall be employed (alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA):
 - i. *Filterable PM₁₀: Method 201 or 201A
 - ii. *Filterable PM_{2.5}: Method 201A
 - iii. NO_x: Method 7 or 7A
 - iv. CO: Method 10
 - v. SO₂: Method 6 or 6A
 - vi. VOC: Method 18, 25, or 25A
 - vii. Pb: Method 12 or 29
 - viii. Hg: Method 29
 - ix. Fluoride: Method 13
 - x. Visible Emissions: Method 9

* Method 201 and 201A are used in conjunction with Method 5D for a positive pressure baghouse, which requires at least 4 hours and 160 dscf per test run pursuant to §60.275a(e)(1)

- e. The tests shall be conducted at the baghouse outlet while the emissions unit is operating at or near its maximum steel production capacity of 200 tph with the maximum allowable amount of tires included in the furnace charge (13.3 lbs tires/ ton steel), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.



The following emission units (EUs) also exhaust to the meltshop building evacuation system which exhausts to baghouse BHC-1 and are typically in operation during the operation of the EAF (P102):

- P103 (Degasser Refiner);
- P115 (Ladle Dryer);
- P117 (Ladle Preheater);
- P119 (Ladle Preheater #2);
- P120 (Ladle Preheater #3);
- P121 (Ladle Preheater #4);
- P901 (Slag Processing); and
- P902 (Hot Metal Transfer).

The additional emissions contributed by these EU's are negligible (estimated at 1-3% of total emissions leaving the baghouse) compared to the emissions from P102. Therefore the emissions limitations specified for P102 in section 3.b)(1) are considered as combined limits which include the emissions from the above listed EUs.

Consequently the compliance of P102 shall be presumed if the stack test results for the combined emissions do not exceed the permit allowable emission rates for P102 by more than 3%. If the test results show the combined limit for any pollutant is exceeded, then all emissions units which contribute to that pollutant's emissions limitations for P102 shall be considered out of compliance.

- f. Monitoring and recording of the operating parameters of the baghouses specified in terms d)(4) and d)(5) above shall be conducted at 15 minute intervals during the duration of the test(s). Hourly averages of the readings shall be used to establish and/or re-verify the parameter ranges or minimum limits specified in those terms.
- g. Pursuant to §60.274a(h), the permittee shall monitor and record the following information for all heats covered by the test:
 - i. charge weights and materials, and tap weights and materials;
 - ii. heat times, including start and stop times, and a log of process operation, including periods of no operation during testing;
 - iii. control device operation parameters (as listed in term f)(2)g. above); and
 - iv. opacity Method 9 data.



- h. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
 - i. Personnel from the appropriate Ohio EPA District Office or local air agency 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.
 - j. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The report shall contain all required information pursuant to §60.276a(f). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
- g) Miscellaneous Requirements
 - (1) None.



3. P111, Stool Plate Rebuild

Operations, Property and/or Equipment Description:

Stool Plate Rebuild, with a maximum of 30 tons per hour of refractory rubble handled, exhausting to a baghouse (P111BH-1)

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|---|
| a. | OAC rule 3745-31-05(A)(3) (PTI 15-0144 issued 07/19/1995) [Best Available Technology (BAT)] | Stack emissions of particulate less than 10 microns in diameter (PM ₁₀) shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases and 13.05 tons/yr. See b)(2)a., b)(2)b. and c)(1). |
| b. | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by rule. |
| c. | OAC rule 3745-17-07(B)(1) | Visible emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average. |
| d. | OAC rule 3745-17-08(B)(3) | See b)(2)c. and b)(2)d. |
| e. | OAC rule 3745-17-11(B)(1) | The 40.04 lb/hr particulate emissions limitation established pursuant to this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3). See f)(1)d. |
| f. | 40 CFR Part 64 (40 CFR 64.1 – 64.10) [Compliance Assurance Monitoring (CAM)] | See c)(1), section d), e)(1) – e)(3) and f)(2). |

- (2) Additional Terms and Conditions
 - a. All particulate emissions from the baghouse are assumed to be less than 10 microns in diameter and are designated as PM₁₀.



- b. The Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a baghouse.
- c. The permittee shall employ Reasonably Available Control Measures (RACM) to prevent fugitive dust from becoming airborne. These measures shall include, but not be limited to, the following, which are sufficient to minimize or eliminate visible emissions of fugitive dust:
 - i. The installation and use of hoods, fans, and/or other equipment to adequately enclose, contain, capture, vent, and control fugitive dust from the emissions unit, meeting the following requirements:
 - (a) the collection efficiency shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and
 - (b) the control equipment for this emissions unit shall achieve an outlet emissions 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 (whichever is less stringent) from the exhaust stack of this emissions unit.
 - d. The emission limitation of 0.030 gr/dscf pursuant to OAC rule 3745-17-08(B)(3) is less stringent than the 0.01 gr/dscf emission limitation required pursuant to OAC rule 3745-31-05(A)(3).
- c) Operational Restrictions
 - (1) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

[Authority for term: 40 CFR Part 64, OAC rule 3745-77-07(A)(1) and PTI 15-0144]
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and

- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

[Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 64]

- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.5 to 6.0 inches of water.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee subject to prior approval of the Canton City Health Department, Air Pollution Control Division.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that



determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C) and 40 CFR Part 64]

- (4) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for the baghouse controlling this emission unit are:
 - a. the visible emissions from the baghouse stack with an indicator level of the limitation specified in b)(1)b. and monitoring frequency in accordance with the monitoring and recordkeeping requirements specified in d)(1);
 - b. the fugitive visible emissions from the building with an indicator level of the limitation specified in b)(1)c. and monitoring frequency in accordance with the monitoring and recordkeeping requirements specified in d)(1); and
 - c. the pressure drop across the baghouse with an indicator level and monitoring frequency in accordance with the monitoring and recordkeeping requirements specified in d)(2) and d)(3).

The CAM performance indicators are indicative of the operation of the baghouse and capture system and were chosen as a reasonable and practical monitoring frequency. The CAM performance indicator were established in accordance with facility recommendations and will be verified and/or adjusted during future emissions testing performed as required by this permit.

When a performance indicator shows operation outside the indicator range, the permittee shall take corrective actions to restore operation of the emissions unit(s) and/or control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operation(s) returned to normal without operator action, or any necessary follow-up actions to return operation to within the indicator range. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The baghouse(s) shall not be configured to have bypass capability.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8. In addition, a QIP will be developed and implemented if the threshold of one occurrence per quarter is exceeded.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (5) Baghouse operating parameters shall be re-verified as a result of any changes to the operating conditions of the baghouses or emissions units. In addition to periodic monitoring of the baghouse operating parameters, the permittee shall also have an Operating, Maintenance, and Inspection (OM&I) program for the baghouse and capture system, including but not limited to:
- a. Checking the bags/filters for deterioration or degradation;
 - b. Checking the cleaning system for proper operation; and
 - c. Checking the hoppers and conveyance systems for proper operation.

Based on the results of the (OM&I) program, repairs to the baghouse and capture system shall be made as needed. If the current CAM indicators and/or the baghouse and capture system (OM&I) program are considered inadequate, the permittee shall develop a Quality Improvement Plan (QIP).

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (6) The permittee shall maintain necessary parts for routine repairs of the monitoring equipment.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.7(b)]

- (7) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring under 40 CFR Part 64 did not provide an indication of an excursion or exceedance, or the results of compliance or performance testing document a need to modify the existing indicator levels, the permittee shall

promptly notify Canton City Health Department, Air Pollution Control Division, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions (i.e. levels), modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. Approved revisions to the monitoring will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by a means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following, at a minimum:
 - a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse;
 - c. each incident of deviation described in “a” (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in “a” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

Note: A departure from the CAM performance indicators described in section d)(4) shall be considered an excursion as defined in 40 CFR Part 64.1. If the permittee has taken corrective actions to restore operation of the emissions unit(s) and/or control equipment to its normal operation, then the departure is not considered a deviation and shall be reported as an excursion.

[Authority for term: OAC rules 3745-77-07(A)(3)(c) and 3745-15-03(C); and 40 CFR 64.9(a)]

- (2) The permittee shall submit semiannual written reports that identify, at a minimum:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
 - b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and



- c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.

[Authority for term: OAC rules 3745-77-07(A)(3)(c) and 3745-15-03(A); and 40 CFR 64.9(a)]

- (3) If the permittee is required under 40 CFR Part 64.8 and d)(4) of this permit to develop a QIP, the permittee shall submit quarterly reports that contain a description of the actions taken to implement a QIP during the reporting period. Upon completion of a QIP, the permittee shall include documentation that the implementation of the plan has been completed and reduced the likelihood of excursions.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (4) All reports shall be submitted in accordance with the reporting requirements of Part A: Standard Terms and Conditions of this permit. Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-15-03(A)]

f) Testing Requirements

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

- a. Emission Limitation:

Stack emissions of particulate less than 10 microns in diameter (PM₁₀) shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases and 13.05 tons/yr.

Applicable Compliance Method:

The gr/dscf emissions limitation was established based on the baghouse manufacturer's design specifications originally used in Permit-To-Install (PTI) 15-0144 issued 12/21/1981.

The ton/yr limitation was developed by multiplying the baghouse outlet grain loading of 0.01 gr/dscf by the maximum volumetric exhaust gas flow of 34,760 dscfm, and applying the appropriate conversion factors as follows:

$$0.01 \text{ gr/dscf} \times 34,760 \text{ dscf/min} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr} \times 8760 \text{ hr/yr} \times 1 \text{ ton/2000 lb} = 13.05 \text{ lb PM}_{10}/\text{yr}$$

Therefore, if compliance is shown with the outlet grain loading allowable emissions limitation, compliance shall also be shown with the annual emissions limitation.



Compliance with the outlet grain loading emissions limitation shall be determined through the emission testing performed per the requirements specified in section f)(2).

b. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

c. Emission Limitation:

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

Applicable Compliance Method:

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

d. Emission Limitation:

40.04 lb/hr particulate emissions

Applicable Compliance Method:

The allowable rate of particulate emissions E is calculated from the formula given in Table I in the Appendix of OAC rule 3745-17-11 using a process weight rate P of 30 tph refractory rubble handled as follows:

$$E = 4.10 (P)^{0.67} = 40.04 \text{ lb/hr}$$

The 40.04 lb/hr particulate emissions rate converts to 0.134 gr/dscf by dividing the mass flow rate by the maximum volumetric exhaust gas flow rate of 34,760 dscfm and applying the appropriate conversion factors as follows:

$$\frac{40.04 \text{ lb/hr}}{34,760 \text{ dscf/min}} \times 7000 \text{ gr/lb} \times 1 \text{ hr/60 min} = 0.134 \text{ gr/dscf}$$

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

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within 6 months after issuance of the permit (following the effective date for the Title V permit).
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable concentration of PM₁₀ in the exhaust stream.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
 - i. PM₁₀: Method 201 or 201A of 40 CFR Part 51, Appendix M
 - ii. Visible emissions (stack): Method 9 of 40 CFR Part 60, Appendix A
 - iii. Visible emissions (fugitive): Method 9 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3).

Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

- d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
- e. Monitoring and recording of the operating parameters of the baghouse specified in term d)(2) above shall be conducted at 15 minute intervals during the duration of the test(s). Hourly averages of the readings shall be used to establish and/or re-verify the parameter ranges or minimum limits specified in that term.
- f. The weight of refractory and stool plates processed for rebuilding during each test run shall be recorded.
- g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).



- h. Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- i. 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 Canton City Health Department, Air Pollution Control Division, within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Canton City Health Department, Air Pollution Control Division.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- g) Miscellaneous Requirements
 - (1) None.



4. P127, Soaking Pit #10

Operations, Property and/or Equipment Description:

Soaking Pit #10 to heat steel ingots rated at 20 mmBtu/hr, with oxyfuel (100% oxygen-enriched natural gas) fired low NOx burners.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|---|
| a. | OAC rule 3745-31-05(A)(3) OAC rules 3745-31-10 through 3745-31-20 (Administrative Permit Modification to PTI 15-01339 to be issued) [Best Available Technology (BAT) and Best Available Control Technology (BACT)] | Particulate emissions less than 10 microns in diameter (PM ₁₀) shall not exceed 0.0075 lb/mmBtu, 0.15 lbs/hr, and 0.66 tons/yr. See b)(2)h. Nitrogen oxides (NOx) emissions shall not exceed 0.14 lb/mmBtu, 2.80 lbs/hr and 12.3 tons/yr. Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu/hr, 1.64 lbs/hr and 7.18 tons/yr. Sulfur dioxide (SO ₂) emissions shall not exceed 0.0006 lb/mmBtu, 0.012 lbs/hr, and 0.05 tons/yr. Volatile organic carbon (VOC) emissions shall not exceed 0.0054 lb/mmBtu, 0.108 lbs/hr, and 0.47 tons/yr. Visible particulate emissions from the stack serving this emissions unit shall not exceed 5 percent opacity as a six-minute average. See b)(2)a., b)(2)b., b)(2)c., b)(2)h., and c). |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|---|
| b. | OAC rule 3745-17-07(A)(1) | Exempt. See b)(2)d. |
| c. | OAC rule 3745-17-11 | Exempt. See b)(2)e. |
| d. | OAC rule 3745-17-10 | Exempt. See b)(2)f. |
| e. | OAC rule 3745-18-06(E) OAC rule 3745-18-82(A) | Exempt. See b)(2)f. and b)(2)g. |

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of oxyfuel (100% oxygen-enriched natural gas) firing only, the use of low-NOx burners, and compliance with the terms and conditions of this permit.
- b. The emissions limitations for PM₁₀, NOx, CO, SO₂, and VOC are based on the emission unit's potential to emit. Therefore, no monitoring, record keeping, and reporting requirements are necessary to ensure ongoing compliance with these emissions limitations.
- c. 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.
- d. The burning of oxyfuel is the only source of particulate emissions from the emissions unit. The uncontrolled mass rate of particulate emissions from the emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(4) because the process weight that causes any emissions of particulate matter is equal to zero.
- e. This emissions unit is designed such that the products of combustion come into direct contact with materials being processed and therefore do not meet the definition of "fuel burning equipment" given in OAC rules 3745-17-01(B)(5) and 3745-18-01(B)(4). It is, therefore, exempt from the emission limitations and control requirements contained in OAC rule 3745-17-10 for fuel burning equipment and subject to the requirements in OAC rule 3745-18-06 as process equipment.
- f. The burning of oxyfuel is the only source of sulfur dioxide from these emissions units. Pursuant to OAC rule 3745-18-06(C), these emissions units are exempt from OAC rules 3745-18-06(E) and 3745-18-82 because the process weight input (excludes gaseous fuels) that causes any emissions of sulfur dioxide is equal to zero, which is less than 1,000 lbs/hour.
- g. All particulate emissions are assumed to be less than 10 microns in diameter and are designated as PM₁₀.



h. The permittee shall employ "Best Available Control Technology" (BACT) for controlling emissions of PM₁₀, CO, VOC, SO₂, and NO_x. BACT for this emissions unit has been determined to be compliance with the allowable emissions in b)(1)a. above.

c) Operational Restrictions

(1) The permittee shall burn only oxyfuel (100% oxygen-enriched natural gas) as fuel in this emissions unit.

[Authority for term: OAC rule 3745-77-07(A)(1) and Administrative Permit Modification to PTI 15-01339 to be issued]

(2) The soaking pit, including all associated equipment (including but not limited to low NO_x burners), shall be operated and maintained in accordance with the manufacturer's specifications.

[Authority for term: OAC rule 3745-77-07(A)(1) and Administrative Permit Modification to PTI 15-01339 to be issued]

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: OAC rule 3745-77-07(C)(1) and Administrative Permit Modification to PTI 15-01339 to be issued]

(2) Records shall be maintained of the total annual amount of oxyfuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1) and Administrative Permit Modification to PTI 15-01339 to be issued]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than oxyfuel was burned in this emissions unit.

[Authority for Term: OACs rule 3745-77-07(A)(3)(c) and 3745-15-03(C)]

(2) All reports shall be submitted in accordance with the reporting requirements of Part A: Standard Terms and Conditions of this permit. Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-15-03(A)]



f) Testing Requirements

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

a. Emission Limitation:

PM₁₀ emissions shall not exceed 0.0075 lb/mmBtu, 0.15 lbs/hr, and 0.66tons/yr.

Applicable Compliance Method:

The lb/mmBtu emissions limitation was established by converting the 7.6 lbs/10⁶ scf emission factor for particulate matter from natural gas combustion (best approximation for oxyfuel) from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (07/98) into lb /mmBtu by dividing the emissions factor by the average heat content of the natural gas supplied to the facility (1,020 Btu/scf).

The hourly emissions limitation was developed by multiplying the 0.0075 lb/mmBtu emission limitation by the rated heat input of 20 mmBtu/hr.

The annual emission limitation was developed by multiplying the hourly emission limitation (0.15lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the hourly emissions limitation, compliance shall also be shown with the annual emissions limitation.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emissions limitation through emissions testing performed in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

b. Emission Limitation:

Nitrogen oxides (NOx) emissions shall not exceed 0.14 lb/mmBtu, 2.80 lbs/hr and 12.3 tons/yr.

Applicable Compliance Method:

The lb/mmBtu emissions limitation was established by converting the 140 lbs lb/10⁶ scf emission factor for NOx from natural gas combustion (best approximation for oxyfuel) from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (07/98) into lb NOx/mmBtu by dividing the emissions factor by the average heat content of the natural gas supplied to the facility (1,020 Btu/scf).

The hourly emissions limitation was developed by multiplying the 0.14 lb/mmBtu emission limitation by the rated heat input of 20 mmBtu/hr.



The annual emission limitation was developed by multiplying the hourly emission limitation (2.80 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the hourly emissions limitation, compliance shall also be shown with the annual emissions limitation.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emissions limitation through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 7 or 7E. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

c. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu/hr, 1.64 lbs/hr and 7.18 tons/yr.

Applicable Compliance Method:

The lb/mmBtu emissions limitation was established by converting the 84 lbs lb/10⁶ scf emission factor for CO from natural gas combustion (best approximation for oxyfuel) from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (07/98) into lb CO/mmBtu by dividing the emissions factor by the average heat content of the natural gas supplied to the facility (1,020 Btu/scf).

The hourly emissions limitation was developed by multiplying the 0.082 lb/mmBtu emission limitation by the rated heat input of 20 mmBtu/hr.

The annual emissions limitation was developed by multiplying the hourly emissions limitation (1.64 lbs/hr) by the maximum annual hours of operation (8,760 hours) and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the hourly emissions limitation, compliance shall also be shown with the annual emissions limitation.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emissions limitation through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 10. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

d. Emission Limitation:

Sulfur dioxide (SO₂) emissions shall not exceed 0.0006 lb/mmBtu, 0.012 lb/hr, and 0.05 tons/yr.

Applicable Compliance Method:

The lb/mmBtu emissions limitation was established by converting the 0.6 lbs lb/10⁶ scf emission factor for SO₂ from natural gas combustion (best



approximation for oxyfuel) from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (07/98) into lb/mmBtu by dividing the emissions factor by the average heat content of the natural gas supplied to the facility (1,020 Btu/scf).

The hourly emissions limitation was developed by multiplying the 0.0006 lb/mmBtu emission limitation by the rated heat input of 20 mmBtu/hr.

The annual emissions limitation was developed by multiplying the hourly emissions limitation (0.012 lbs/hr) by the maximum annual hours of operation (8,760 hours) and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the hourly emissions limitation, compliance shall also be shown with the annual emissions limitation.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emissions limitation through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 10. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division

e. Emission Limitation:

Volatile organic carbon (VOC) emissions shall not exceed 0.0054 lb/mmBtu, 0.108 lbs/hr, and 0.47 tons/yr.

Applicable Compliance Method:

The lb/mmBtu emissions limitation was established by converting the 5.5 lbs lb/10⁶ scf emission factor for VOC from natural gas combustion (best approximation for oxyfuel) from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (07/98) into lb /mmBtu by dividing the emissions factor by the average heat content of the natural gas supplied to the facility (1,020 Btu/scf).

The hourly emissions limitation was developed by multiplying the 0.0054 lb/mmBtu emission limitation by the rated heat input of 20 mmBtu/hr.

The annual emissions limitation was developed by multiplying the hourly emissions limitation (0.108 lbs/hr) by the maximum annual hours of operation (8,760 hours) and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the hourly emissions limitation, compliance shall also be shown with the annual emissions limitation.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emissions limitation through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 18, 25, or 25A. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division



f. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 5 percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

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

g) Miscellaneous Requirements

(1) None.



5. P129, Baghouse Dust Handling System

Operations, Property and/or Equipment Description:

Dust handling system for Meltshop Baghouse (BHC-1) including a cyclone with a secondary baghouse, a silo with a tertiary baghouse, dust conveying equipment, and dust transfer equipment from silo to truck/railcar.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|--|
| a. | OAC rule 3745-31-05(A)(3) OAC rules 3745-31-10 through 3745-31-20 (Administrative Modification to PTI 15-01339 issued 07/15/2003 to be issued) [Best Available Technology (BAT) and Best Available Control Technology (BACT)] | Stack emissions of particulate less than 10 microns in diameter (PM ₁₀) from the secondary baghouse exhaust fan shall not exceed 0.01 gr/dscf of exhaust gas, 0.27 lb/hr, and 1.18 tpy. Stack emissions of particulate less than 10 microns in diameter (PM ₁₀) from the tertiary baghouse (silo vent filter) shall not exceed 0.01 gr/dscf of exhaust gas, 0.13 lb/hr, and 0.57 tpy. Total stack emissions (secondary and tertiary baghouse combined) of particulate less than 10 microns in diameter (PM ₁₀) from this emission unit shall not exceed 0.40 lb/hr and 1.75 tpy. See section b)(2)a., b)(2)b., b)(2)h., and c). |
| b. | OAC rule 3745-17-07(A) OAC rule 3745-17-07(B)(1) | See b)(2)c. |
| c. | OAC rule 3745-17-08(B)(3) | See b)(2)d. and b)(2)e. |
| d. | OAC rule 3745-17-11 | The 0.551 lb/hr of particulate emissions limitation pursuant to this rule is less stringent than the particulate emissions limitations established pursuant to OAC rule 3745-31-05(A)(3). See f)(1)e. |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|---|
| e. | 40 CFR Part 60, Subpart AAa (40 CFR 60.270a – 60.276a) [In accordance with 40 CFR 60.270a, this emissions unit is dust-handling system located at a steel plant that commenced construction or modification after August 17, 1983] | Visible emissions of any gases (stack or fugitive) from the dust-handling system shall not exhibit 10% or greater opacity as specified by paragraph 60.272a(b) of this rule. See b)(2)f. |
| f. | 40 CFR Part 60, Subpart A (40 CFR 60.1 - 60.19) | General Provisions |

(2) Additional Terms and Conditions

- a. All particulate emissions from the baghouse exhausts are assumed to be less than 10 microns in diameter and are designated as PM₁₀.
- b. The Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a cyclone separator discharging to the secondary baghouse and in-line filter, use of a tertiary baghouse on the silo vent, and compliance with the terms and conditions of this permit.
- c. The visible emissions limitation specified by these rules are less stringent than the visible emissions limitation required pursuant to 40 CFR Part 60, Subpart AAa (40 CFR 60.272a(b)).
- d. The permittee shall employ Reasonably Available Control Measures (RACM) to prevent fugitive dust from becoming airborne. These measures shall include, but not be limited to, the following, which are sufficient to minimize or eliminate visible emissions of fugitive dust:
 - i. The installation and use of hoods, fans, and/or other equipment to adequately enclose, contain, capture, vent, and control fugitive dust from the emissions unit, meeting the following requirements:
 - (a) the collection efficiency shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and
 - (b) the control equipment for this emissions unit shall achieve an outlet emissions 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 (whichever is less stringent) from the exhaust stack(s) of this emissions unit.



- e. The emission limitation of 0.030 gr/dscf pursuant to OAC rule 3745-17-08(B)(3) is less stringent than the 0.01 gr/dscf emission limitation required pursuant to OAC rule 3745-31-05(A)(3).
 - f. The dust-handling system shall be as defined in 40 CFR 60.271a to mean:

“equipment used to handle particulate matter collected by the control device for an electric arc furnace or AOD vessel subject to this subpart. For the purposes of this subpart, the dust-handling system shall consist of the control device dust hoppers, the dust-conveying equipment, any central dust storage equipment, the dust-treating equipment (e.g., pug mill, pelletizer), dust transfer equipment (from storage to truck), and any secondary control devices used with the dust transfer equipment.”
 - g. This emissions unit is subject to the applicable provisions of Prevention of Significant Deterioration (PSD) Regulations as promulgated by the US EPA , 40 CFR 52.21.
 - h. The permittee shall employ “Best Available Control Technology” (BACT) for controlling emissions of PM₁₀. BACT for this emissions unit has been determined to be compliance with the allowable stack particulate emission rates in b)(1)a. above.
- c) Operational Restrictions
- (1) The vent from the dust silo shall be equipped with a fabric filter (tertiary baghouse).
 - (2) The pneumatic conveying system cyclone separator shall exhaust through a secondary baghouse and in-line filter.
 - (3) The emissions from this emissions unit shall be vented to the fabric filters (baghouses) described in terms c)(1)-(2) above at all times the emissions unit is in operation.
- [Authority for term: OAC rule 3745-77-07(A)(1) and PTI 15-01339]
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks and for any visible emissions of fugitive dust from the equipment enclosures or building egress points (i.e., building windows or doors) serving this emissions unit. Since the dust handling equipment is located inside a three-sided structure and the stacks serving this equipment vent inside this three-sided structure, these observations shall be made on any visible particulate emissions coming from any opening in this structure. These observations shall be taken for at least ten minutes. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;



- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 15-01339]

e) Reporting Requirements

- (1) The permittee shall submit semiannual written reports that identify, at a minimum:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
 - b. all days during which any visible emissions of fugitive dust were observed from the equipment enclosures and building egress points (i.e., building windows, doors, etc.) serving this emissions unit; and
 - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.

[Authority for term: OAC rules 3745-77-07(A)(3)(c) and 3745-15-03(A); and PTI 15-01339]

- (2) All reports shall be submitted in accordance with the reporting requirements of Part A: Standard Terms and Conditions of this permit. Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-15-03(A)]

- (3) The permittee shall comply with the reporting requirements pursuant to 40 CFR Part 60, Subpart A section 60.7.



f) Testing Requirements

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

a. Emission Limitation:

Stack emissions of particulate less than 10 microns in diameter (PM₁₀) from the secondary baghouse exhaust fan shall not exceed 0.01 gr/dscf of exhaust gas, 0.27 lb/hr, and 1.18 tpy.

Applicable Compliance Method:

The gr/dscf emissions limitation was based on the baghouse manufacturer's design specifications originally used in Permit-To-Install (PTI) 15-01339 issued 10/11/2001.

The hourly emissions limitation may be determined by multiplying the baghouse outlet grain loading by the maximum baghouse exhaust gas flow of 3200 dscfm and applying the appropriate conversion factors as follows:

$$0.01 \text{ gr/dscf} \times 3200 \text{ dscf/min} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr} = 0.27 \text{ lb/hr}$$

The ton per year emission limitation was developed by multiplying the short-term allowable PM₁₀ emission limitation (0.27 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

If required, the permittee shall demonstrate compliance with the outlet grain loading emissions limitation through emissions testing performed in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

The visible emission checks required by term d)(2) above shall assure compliance with this limit on an ongoing basis.

b. Emission Limitations:

Stack emissions of particulate less than 10 microns in diameter (PM₁₀) from the tertiary baghouse (silo vent filter) shall not exceed 0.01 gr/dscf of exhaust gas, 0.13 lb/hr, and 0.57 tpy.

Applicable Compliance Method:

The gr/dscf emissions limitation was based on the baghouse manufacturer's design specifications originally used in Permit-To-Install (PTI) 15-01339 issued 10/11/2001



The hourly emissions limitation may be determined by multiplying the baghouse outlet grain loading by the maximum baghouse exhaust gas flow of 1500 dscfm and applying the appropriate conversion factors as follows:

$$0.01 \text{ gr/dscf} \times 1500 \text{ dscf/min} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr} = 0.13 \text{ lb/hr}$$

The ton per year emission limitation was developed by multiplying the short-term allowable PM₁₀ emission limitation (0.13 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

If required, the permittee shall demonstrate compliance with the outlet grain loading emissions limitation through emissions testing performed in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

The visible emission checks required by term d)(2) above shall assure compliance with this limit on an ongoing basis.

c. Emission Limitations:

Total stack emissions (secondary and tertiary baghouse combined) of particulate less than 10 microns in diameter (PM₁₀) from this emission unit shall not exceed 0.40 lb/hr and 1.75 tpy.

Applicable Compliance Method:

The lb/hr and tpy emissions limitation is the summation of the secondary and tertiary baghouse limitations and was originally included in Permit-To-Install (PTI) 15-01339 issued 10/11/2001 and as shown below.

$$0.27 \text{ lbs/hr} + 0.13 \text{ lb/hr} = 0.40 \text{ lbs/hr}$$

$$1.18 \text{ tpy} + 0.57 \text{ tpy} = 1.75 \text{ tpy}$$

Therefore, if compliance is shown with the individual outlet grain loading allowable emission limitations and volumetric flow rates of the baghouses, compliance shall also be shown with these lb/hr and annual emission limitations.

d. Emission Limitation:

Visible emissions of any gases (stack or fugitive) from the meltshop baghouse dust-handling system shall not exhibit 10% or greater opacity.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.



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

e. Emission Limitation:

0.551 lb/hr of particulate emissions

Applicable Compliance Method:

The process weight rate P in tons/hr is calculated from the lb/hr of dust emissions leaving the secondary and tertiary baghouses using an assumed baghouse collection efficiency of 99.5% and converting to tons/hr as follows:

$$P = \frac{(0.27 + 0.13) \text{ lb/hr} \times 1 \text{ ton}/2000\text{lb}}{(1.000 - 0.995)} = 0.04 \text{ ton/hr}$$

The allowable rate of particulate emissions E for $0 < P \leq 0.05$ is given as 0.551 lb/hr by the formula in Table I of the Appendix to OAC rule 3745-17-11.

The 0.551 lb/hr particulate emissions rate converts to 0.014 gr/dscf by dividing the mass flow rate by the maximum volumetric exhaust gas flow rate of 4700 dscfm for the secondary and tertiary baghouses combined and applying the appropriate conversion factors as follows:

$$\frac{0.551 \text{ lb/hr}}{(3200 + 1500) \text{ dscf/min}} \times 7000\text{gr/lb} \times 1 \text{ hr}/60 \text{ min} = 0.014 \text{ gr/dscf}$$

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 15-01339]

g) Miscellaneous Requirements

(1) None.



6. Emissions Unit Group –Caster and Soaking Pit #13: P130,P131,

| EU ID | Operations, Property and/or Equipment Description |
|-------|--|
| P130 | Soaking Pit #13 to heat steel ingots, rated at 20 mmBtu/hr, with oxyfuel (100% oxygen-enriched natural gas) fired low NOx burners |
| P131 | 20 mmBtu/hr natural gas-fired Continuous Steel Caster equipped with low NOx burners, with a maximum operating rate of 170 tons of steel per hour |

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

(1) b)(1)b. and b)(2)c.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|--|
| a. | OAC rule 3745-31-05(A)(3) June 30, 2008 (Administrative Permit Modification to PTI P0104388 to be issued) [Best Available Technology (BAT) for NAAQS Pollutants < 10 TPY] | The emissions limitations for carbon monoxide (CO) specified by this rule are equivalent to the emissions limitations established pursuant to OAC rule 3745-31-10 through 3745-31-20. Nitrogen oxide (NOx) emissions shall not exceed 0.445 tons/month averaged over a 12-month rolling period. See b)(2)a. b)(2)b., and b)(2)e. |
| b. | OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008 [Best Available Technology (BAT) Exemption for NAAQS Pollutants < 10 TPY] | The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the NOx and CO emissions from this air contaminant source since the uncontrolled potential to emit is less than 10 tons/year each. See b)(2)c. |
| c. | OAC rule 3745-31-10 through OAC rule 3745-31-20 (Administrative Permit Modification to PTI P0104388 to be issued) | CO emissions shall not exceed 1.64 lb/hr and 7.18 tons/year. See b)(2)d. |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|---|
| | [Best Available Control Technology (BACT)] | |
| d. | OAC 3745-17-11 | Exempt. See b)(2)f. and c)(1) |
| e. | OAC 3745-17-10 | Exempt. See b)(2)g. |
| f. | OAC rule 3745-17-07(A)(1) | Exempt. See b)(2)h. |
| g. | OAC rule 3745-18-06(E) OAC rule 3745-18-82(A) | Exempt. See b)(2)i. and c)(1) |

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of oxyfuel firing only in P130 and natural gas firing only in P131.
- b. This Best Available Technology (BAT) emissions limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- c. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.
- d. The permittee shall employ "Best Available Control Technology" (BACT) for controlling emissions of CO. BACT for CO emissions from this unit has been determined to be the following:
 - i. Good combustion practices and acceptance of a CO emissions limitation of 84 lb/mmscf of oxyfuel or natural gas burned.
 - ii. Compliance with the emissions limits listed in b)(1)c above.
- e. The uncontrolled potential emissions of sulfur dioxide (SO₂), volatile organic compounds (VOC), and particulate emissions less than 10 microns in diameter (PM₁₀) when firing oxyfuel in this emissions unit are negligible (less than 10 pounds per day), and therefore emissions limits for these pollutants have not been established.
- f. The burning of oxyfuel in P130 and natural gas in P131 are the only sources of particulate emissions from these emissions units. The uncontrolled mass rate of particulate emissions from these emissions units is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(4) because the process weight that causes any emissions of particulate matter is equal to zero.



- (2) All reports shall be submitted in accordance with the reporting requirements of Part A: Standard Terms and Conditions of this permit. Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-15-03(A)]

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following method(s):

- a. Emission Limitation:

NOx emissions shall not exceed 0.445 tons/month averaged over a 12-month rolling period.

Applicable Compliance Method:

An emissions rate of 0.061 lb NOx/mmBtu was calculated by dividing the NOx emissions factor of 50 lb NOx/10⁶ scf for natural gas combustion (also best approximation for oxyfuel) from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (07/98) by the natural gas heating value of 1,020 Btu/scf and multiplying the result by 1.25 to provide a 25% margin.

An annual NOx emissions rate of 5.34 tons/yr was calculated by multiplying the lb/mmBtu NOx emissions by the maximum rated heat input of 20 mmBtu/hr times the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. The tons-per-month emission limitation is established by dividing the annual NOx emissions in tons/yr by 12 months/yr. Therefore, compliance with the lb/mmBtu NOx emissions limitation demonstrates compliance with the 12-month rolling period emissions limitation.

If required, the permittee shall demonstrate compliance with the hourly emissions limitation through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 7 or 7E. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

- b. Emission Limitation:

CO emissions shall not exceed 1.64 lbs/hour and 7.18 tons/yr

Applicable Compliance Method:

An emissions rate of 0.082 lb CO/mmBtu was calculated by dividing the CO emissions factor of 84 lb CO/10⁶ scf for natural gas combustion (also best approximation for oxyfuel) from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (07/98) by the natural gas heating value of 1,020 Btu/scf.



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The hourly emissions limitation was developed by multiplying the 0.082 lb CO/mmBtu emissions rate by the maximum rated heat input of 20 mmBtu/hr.

The annual emissions limitation was developed by multiplying the hourly emissions limitation by the maximum annual hours of operation (8,760 hours) and then dividing by 2,000 pounds per ton. Therefore, compliance with the hourly emissions limitation demonstrates compliance with the annual emissions limitation.

If required, the permittee shall demonstrate compliance with the hourly emissions limitation through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 10. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

[Authority for term: OAC rule 3745-77-07(C)(1) and Administrative Permit Modification to PTI P0104388 to be issued]

- g) Miscellaneous Requirements
 - (1) None.



7. Emissions Unit Group -Cleaver-Brooks Package Boilers: B101,B102,

| EU ID | Operations, Property and/or Equipment Description |
|-------|--|
| B101 | Boiler #1: Cleaver-Brooks natural gas-fired package boiler rated at 53 mmBtu/hr. |
| B102 | Boiler #2: Cleaver-Brooks natural gas-fired package boiler rated at 53 mmBtu/hr. |

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|---|
| a. | OAC rule 3745-31-05(A)(3) (Administrative Permit Modification to PTI 15-0144 to be issued) [Best Available Technology (BAT)] | Particulate emissions less than 10 microns in diameter (PM ₁₀) shall not exceed 0.02 lb/mmBtu and 4.64 tons/yr. Sulfur dioxide (SO ₂) emissions shall not exceed 0.0006 lb/mmBtu and 0.14 tons/yr. Nitrogen oxide (NO _x) emissions shall not exceed 0.15 lb/mmBtu and 34.82 tons/yr. Carbon monoxide (CO) emissions shall not exceed 0.04 lb/mmBtu and 9.29 tons/yr. See section b)(2)a., b)(2)b., b)(2)c., b)(2)d., and c)(1). |
| b. | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from the stack serving these emissions units shall not exceed 20% opacity as a 6-minute average, except as provided by rule. |
| c. | OAC rule 3745-17-10 | See b)(2)e. |
| d. | OAC rule 3745-18-06 OAC rule 3745-18-82(O)(2) | See b)(2)f. |
| e. | 40 CFR 52.1881(b)(9)(vi)(A) | See b)(2)g. |

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas firing only and compliance with the terms and conditions of this permit.
- b. All particulate emissions are generated from natural gas combustion and are assumed to be less than 10 microns in diameter (designated as PM₁₀).
- c. The emissions limitations for PM₁₀, NO_x, SO₂, and CO are based on each emission unit's potential to emit. Therefore no monitoring, record keeping and reporting requirements are necessary to ensure ongoing compliance with these emissions limitations.
- d. The uncontrolled potential emissions of volatile organic compounds (VOC) when firing natural gas in these emissions units are negligible (less than 10 pounds per day), and therefore emissions limits for this pollutant have not been established.
- e. The particulate emissions limitation of 0.020 lb/mmBtu of actual heat input specified by this rule is equivalent to the particulate emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
- f. The sulfur dioxide (SO₂) emissions limitation of 0.67 lb/mmBtu specified in OAC rule 3745-18-82(O)(2) applies to this emission unit. However, per OAC rule 3745-18-06(A), this emission unit is exempt from that emission limitation, and any other applicable emission limitations listed in OAC rule 3745-18-06 during any calendar day in which natural gas is the only fuel burned.
- g. The sulfur dioxide (SO₂) emissions limitation of 3.08 lb/mmBtu specified by this rule is less stringent than the emissions limitation required by OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

- (1) The permittee shall burn only natural gas as fuel in these emissions units.

[Authority for term: OAC rule 3745-77-07(A)(1) and Administrative Permit Modification to PTI 15-0144 to be issued]

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: OAC rule 3745-77-07(C)(1) and Administrative Permit Modification to PTI 15-0144 to be issued]



- (2) Records shall be maintained of the total amount of natural gas burned in each of these emissions units.

[Authority for term: OAC rule 3745-77-07(C)(1) Administrative Permit Modification to PTI 15-0144 to be issued]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify, at a minimum, each day when a fuel other than natural gas was burned in these emissions units.

[Authority for term: OAC rules 3745-77-07(A)(3)(c) and 3745-15-03(C)]

- (2) All reports shall be submitted in accordance with the reporting requirements of Part A: Standard Terms and Conditions of this permit. Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-15-03(A)]

f) Testing Requirements

- (1) Compliance with the emissions limitations and/or control requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Particulate emissions less than 10 microns in diameter (PM₁₀) shall not exceed 0.02 lb/mmBtu and 4.64 tons/yr.

Applicable Compliance Method:

The lb/mmBtu emissions limitation was provided by the facility in their permit application for the original PTI 15-0144 issued 12/21/1981 for this emissions unit.

The ton per year emission limitation was developed by multiplying the lb/mmBtu emission limitation by the rated heat input of 53 mmBtu/hr times the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, compliance with the lb/mmBtu allowable emission limitation demonstrates compliance with the annual emission limitation.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emissions limitation through emissions testing performed in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.



b. Emission Limitation:

Sulfur dioxide (SO₂) emissions shall not exceed 0.0006 lb/mmBtu and 0.14 tons/yr.

Applicable Compliance Method:

The lb/mmBtu emissions limitation was established by dividing the SO₂ emissions factor of 0.6 lb SO₂/10⁶ scf for natural gas combustion from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (07/98) by the natural gas heating value of 1,020 Btu/scf.

The ton per year emission limitation was developed by multiplying the lb/mmBtu emission limitation by the rated heat input of 53 mmBtu/hr times the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, compliance with the lb/mmBtu allowable emission limitation demonstrates compliance with the annual emission limitation.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emissions limitation through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 6 or 6A. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

c. Emission Limitation:

Nitrogen oxide (NO_x) emissions shall not exceed 0.15 lb/mmBtu and 34.82 tons/yr.

Applicable Compliance Method:

Stack testing performed on B101 on 4/18/1990 demonstrated a NO_x emissions factor of 0.125 lb/mmBtu when firing natural gas. The lb/mmBtu emissions limitation was established by multiplying the stack test result by 1.20 to provide a 20% margin.

The ton per year emission limitation was developed by multiplying the lb/mmBtu emission limitation by the rated heat input of 53 mmBtu/hr times the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, compliance with the lb/mmBtu allowable emission limitation demonstrates compliance with the annual emission limitation.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emissions limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 7 or 7E. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.



d. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 0.04 lb/mmBtu and 9.29 tons/yr.

Applicable Compliance Method:

The lb/mmBtu emissions limitation was provided by the facility in their permit application for the original PTI 15-0144 issued 12/21/1981 for this emissions unit.

The ton per year emissions limitation was developed by multiplying the lb/mmBtu emissions limitation by the rated heat input of 53 mmBtu/hr times the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, compliance with the lb/mmBtu emissions limitation demonstrates compliance with the annual emissions limitation.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 10. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

e. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations using the methods and procedures specified in U.S.EPA Reference Method 9.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 15-0144]

- (2) The permittee shall conduct, or have conducted, emission testing for Emissions Unit B102 in accordance with the following requirements. The results of the testing for B102 shall be considered representative of the emissions from B101, which is an identical unit:
- a. The emissions testing for B102 shall be conducted within 9 months after issuance of the permit (following the effective date of the Title V permit).
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NO_x and CO, in the appropriate averaging period(s).
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
 - i. for NO_x, Method 7 of 40 CFR Part 60, Appendix A, and
 - ii. for CO, Method 10 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

- d. The tests shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
- e. The following parameters, as a minimum, shall be monitored and recorded for this emissions unit during the testing at 15-minute intervals:
 - i. the steam flow and feedwater flow rates,
 - ii. the boiler steam outlet temperature and pressure,
 - iii. the feedwater temperature, and
 - iv. the natural gas flow rate.
- f. The total natural gas fired for each test-run shall be recorded and at least one sample of the natural gas fired during the 3 test-runs shall be collected and analyzed to determine its heating value in Btu/scf.
- g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).
- h. Personnel from the Canton City Health Department, Air Pollution Control Division, shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.



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

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

- g) Miscellaneous Requirements
 - (1) None.



8. Emissions Unit Group –Ladle Dryer and Ladle Preheater: P115, P117

| EU ID | Operations, Property and/or Equipment Description |
|-------|---|
| P115 | 10 mmBtu/hr natural gas-fired ladle dryer |
| P117 | 7 mmBtu/hr natural gas-fired ladle preheater #1 |

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|---|
| a. | OAC rule 3745-31-05(A)(3) (Administrative Permit Modification to PTI 15-0144 to be issued) [Best Available Technology (BAT)] | <u>P115:</u> Particulate emissions less than 10 microns in diameter (PM ₁₀) shall not exceed 0.020 lbs/mmBtu. See b)(2)a. and b)(2)i. Nitrogen oxides (NOx) emissions shall not exceed 0.50 lb/mmBtu and 21.90 tons/yr. Carbon monoxide (CO) emissions shall not exceed 0.04 lb/mmBtu and 1.75 tons/yr. <u>P117:</u> Particulate emissions less than 10 microns in diameter (PM ₁₀) shall not exceed 0.020 lbs/mmBtu. See b)(2)a. and b)(2)i. Nitrogen oxides (NOx) emissions shall not exceed 0.50 lb/mmBtu and 15.33 tons/yr. Carbon monoxide (CO) emissions shall |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|--|
| | | not exceed 0.04 lb/mmBtu and 1.23 tons/yr. See b)(2)b., b)(2)c., b)(2)d., b)(2)h., and c)(1). |
| b. | OAC rule 3745-17-07(A)(1) | Exempt. See b)(2)e. |
| c. | OAC rule 3745-17-11 | Exempt. See b)(2)f. |
| d. | OAC rule 3745-17-10 | Exempt. See b)(2)g. |
| e. | OAC rule 3745-18-06(E) OAC rule 3745-18-82(A) | Exempt. See b)(2)f. and b)(2)g. |

(2) Additional Terms and Conditions

- a. All particulate emissions are assumed to be less than 10 microns in diameter and are designated as PM₁₀.
- b. The Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas firing only.
- c. The emissions limitations for PM₁₀, NO_x and CO are based on the emission unit's potential to emit. Therefore, no monitoring, record keeping, and reporting requirements are necessary to ensure ongoing compliance with these emissions limitations.
- d. The uncontrolled potential emissions of sulfur dioxide (SO₂) and volatile organic compounds (VOC) when firing natural gas in this emissions unit are negligible (less than 10 pounds per day), and therefore emissions limits for these pollutants have not been established.
- e. These emissions units are 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 units are not subject to the requirements of OAC rule 3745-17-11.
- f. The burning of natural gas is the only source of particulate emissions from the emissions units. The uncontrolled mass rate of particulate emissions from each of the emissions units is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(4) because the process weight that causes any emissions of particulate matter is equal to zero.
- g. This emissions units are designed such that the products of combustion come into direct contact with materials being processed and therefore do not meet the definition of "fuel burning equipment" given in OAC rules 3745-17-01(B)(5) and 3745-18-01(B)(4). They are, therefore, exempt from the emission limitations and



control requirements contained in OAC rule 3745-17-10 for fuel burning equipment but are subject to the requirements in OAC rule 3745-18-06 as process equipment.

- h. The burning of natural gas is the only source of sulfur dioxide from these emissions units. Pursuant to OAC rule 3745-18-06(C), these emissions units are exempt from OAC rules 3745-18-06(E) and 3745-18-82 because the process weight input (excludes gaseous fuels) that causes any emissions of sulfur dioxide is equal to zero, which is less than 1,000 lbs/hour.
- i. In addition to emissions units P115 and P117, and emissions units P102, P103, P117, P119, P120, P121, P901, and P902 are also located in the facility meltshop building and are typically in operation during the operation of this emissions unit.

The emissions from emissions units P115 and P117 are captured by the meltshop building evacuation system in combination with the emissions from emissions units P102, P103, P117, P119, P120, P121, P901, and P902. The combined emissions exhaust to a common meltshop baghouse (BHC-1). Therefore it is not practical to measure the emissions from emissions unit P115 or P117 individually.

Compliance with the individual PM₁₀, NO_x and CO emissions limitations for emissions unit P115 and P117 pursuant to OAC rule 3745-31-05(A)(3) above is assumed provided compliance with the combined PM₁₀, NO_x and CO emissions limitations exhausting from the the meltsop baghouse (BHC-1) do not exceed the following as specified in sections 3.f)(1)a., 3.f)(1)c. and 3.f)(1)d. (for P102) as summarized below :

- (a) PM₁₀: 0.076 lb/ton molten steel produced by the EAF (P102)
- (b) NO_x: 0.20 lb/ton molten steel produced by the EAF (P102)
- (c) CO: 3.5 lb/ton molten steel produced by the EAF (P102)

c) Operational Restrictions

- (1) The permittee shall burn only natural gas as fuel in these emissions units.

[Authority for term: OAC rule 3745-77-07(A)(1) and Administrative Permit Modification to PTI 15-0144 to be issued]

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: OAC rule 3745-77-07(C)(1) and Administrative Permit Modification to PTI 15-0144 to be issued]



- (2) Records shall be maintained of the total annual amount of natural gas burned in each emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1) and Administrative Permit Modification to PTI 15-0144 to be issued]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify, at a minimum, each day when a fuel other than natural gas was burned in each emissions unit

[Authority for term: OAC rules 3745-77-07(A)(3)(c) and 3745-15-03(C)]

- (2) All reports shall be submitted in accordance with the reporting requirements of Part A: Standard Terms and Conditions of this permit. Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-15-03(A)]

f) Testing Requirements

- (1) Compliance with the emissions limitations and/or control requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

P115:

Particulate emissions less than 10 microns in diameter (PM₁₀) shall not exceed 0.020 lbs/mmBtu and 0.88 tons/yr.

P117:

Particulate emissions less than 10 microns in diameter (PM₁₀) shall not exceed 0.020 lbs/mmBtu and 0.61 tons/yr.

Applicable Compliance Method:

The lb/mmBtu emissions limitation was provided by the facility in their permit application for the original PTI 15-0144 issued 12/21/1981 for these emissions units.

The ton per year emissions limitation of each emissions unit was developed by multiplying the lb PM₁₀/mmBtu emissions limitation by the rated heat input of each emissions unit (in mmBtu/hr) times the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, compliance with the lb/mmBtu emissions limitation demonstrates compliance with the annual emissions limitations.



Compliance with the individual PM₁₀ emissions limitation of 0.020 lb PM₁₀/mmBtu from emissions unit P115 or P117 exhausting to meltshop baghouse (BHC-1) is assumed provided compliance with the combined PM₁₀ emissions limitation from the baghouse of 0.076 lb PM₁₀/ton molten steel is demonstrated by stack testing of the baghouse exhaust gases in accordance with the procedure set forth for testing of the EAF (P102) in section 3.f)(2)

b. Emission Limitation:

P115:

Nitrogen oxides (NOx) emissions shall not exceed 0.50 lb/mmBtu and 21.90 tons/yr.

P117:

Nitrogen oxides (NOx) emissions shall not exceed 0.50 lb/mmBtu and 15.33 tons/yr.

Applicable Compliance Method:

The lb/mmBtu emissions limitation was provided by the facility in their permit application for the original PTI 15-0144 issued 12/21/1981 for these emissions units.

The ton per year emissions limitation of each emissions unit was developed by multiplying the lb NOx /mmBtu emissions limitation by the rated heat input of each emissions unit (in mmBtu/hr) times the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, compliance with the lb/mmBtu emissions limitation demonstrates compliance with the annual emissions limitations.

Compliance with the individual NOx emissions limitation of 0.50 lb NOx/mmBtu from emissions unit P115 or P117 exhausting to meltshop baghouse (BHC-1) is assumed provided compliance with the combined NOx emissions limitation from the baghouse of 0.20 lb NOx/ton molten steel is demonstrated by stack testing of the baghouse exhaust gases in accordance with the procedure set forth for testing of the EAF (P102) in section 3.f)(2).

c. Emission Limitation:

P115:

Carbon monoxide (CO) emissions shall not exceed 0.04 lb/mmBtu and 1.75 tons/yr.

P117:

Carbon monoxide (CO) emissions shall not exceed 0.04 lb/mmBtu and 1.23 tons/yr.



Applicable Compliance Method:

The lb/mmBtu emissions limitation was provided by the facility in their permit application for the original PTI 15-0144 issued 12/21/1981 for these emissions units.

The ton per year emissions limitation of each emissions unit was developed by multiplying the lb CO/mmBtu emissions limitation by the rated heat input of each emissions unit (in mmBtu/hr) times the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, compliance with the lb/mmBtu emissions limitation demonstrates compliance with the annual emissions limitation.

Compliance with the individual CO emissions limitation of 0.04 lb CO/mmBtu from emissions unit P115 or P117 exhausting to meltshop baghouse (BHC-1) is assumed provided compliance with the combined CO emissions limitation from the baghouse of 3.5 lb CO/ton molten steel is demonstrated by stack testing of the baghouse exhaust gases in accordance with the procedure set forth for testing of the EAF (P102) in section 3.f)(2).

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

- g) Miscellaneous Requirements
 - (1) None.



9. Emissions Unit Group –Particulate Units: P107,P109,P112,P116

| EU ID | Operations, Property and/or Equipment Description |
|-------|---|
| P107 | Billet Grinders No.1 and No.2 exhausting to a baghouse (P107BH-1), with maximum combined capacity during simultaneous operation of 117 tons steel processed per hour |
| P109 | Shot Blaster exhausting to a cyclone separator to recover the spent shot and then to a baghouse (P109BH-1) for particulate control. Maximum operating rate of 117 tons steel processed per hour |
| P112 | Truck Dump Station handling a maximum of 14.13 tons per hour of material, exhausting to a baghouse (P112BH-1) |
| P116 | Melt Shop Additive Storage Bins handling a maximum of 2.0 tons per hour of material, exhausting to a two-compartment baghouse with a single stack |

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|--|
| a. | OAC rule 3745-31-05(A)(3) (PTI 15-0144 issued 07/19/1995) [Best Available Technology (BAT)] | Stack emissions of particulate less than 10 microns in diameter (PM ₁₀) shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases and: 18.92 tons/yr. for P107; 2.65 tons/yr for P109; 13.24 tons/yr for P112; and 23.52 tons/yr for P116. See b)(2)a., b)(2)b. and c)(1). |
| b. | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by rule. |
| c. | OAC rule 3745-17-07(B)(1) | Visible emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average. |
| d. | OAC rule 3745-17-08(B)(3) | See b)(2)c. and b)(2)d. |
| e. | OAC rule 3745-17-11(B)(1) | The lb/hr particulate emissions limitations listed below as established pursuant to this rule are less stringent than the |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|--|-------------------------------|--|
| | | limitations established pursuant to OAC rule 3745-31-05(A)(3): 52.9 lb/hr for P107 and P109 each; 83.14 lb/hr for P112; and 22.43 lbs/hr for P116. See f)(1)d. |

(2) Additional Terms and Conditions

- a. All particulate emissions from the baghouse are assumed to be less than 10 microns in diameter and are designated as PM₁₀.
- b. The Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a baghouse.
- c. The permittee shall employ Reasonably Available Control Measures (RACM) to prevent fugitive dust from becoming airborne. These measures shall include, but not be limited to, the following, which are sufficient to minimize or eliminate visible emissions of fugitive dust:
 - i. The installation and use of hoods, fans, and/or other equipment to adequately enclose, contain, capture, vent, and control fugitive dust from these emissions units shall meet the following requirements:
 - (a) the collection efficiency shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and
 - (b) the control equipment for these emissions units shall achieve an outlet emissions 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 (whichever is less stringent) from the exhaust stack of these emissions units.
 - d. The emission limitation of 0.030 gr/dscf pursuant to OAC rule 3745-17-08(B)(3) is less stringent than the 0.01 gr/dscf emission limitation required pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

- (1) The emissions from these emissions units shall be vented to their baghouse at all times the emissions units are in operation.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 15-0144]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when the emissions units are in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving the emissions units. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable ranges established for the pressure drops across each baghouse compartment for the baghouses associated with the emissions units are as follows:
 - a. for P107: between 0.5 to 6.0 inches of water,
 - b. for P109: between 0.5 to 6.0 inches of water,
 - c. for P112: between 0.5 to 9.0 inches of water, and
 - d. for P116: between 0.5 to 9.0 inches of water.
- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across each compartment of the baghouse when the controlled emissions units are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the each compartment of baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed



necessary by the permittee subject to prior approval of the Canton City Health Department, Air Pollution Control Division.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Canton City Health Department, Air Pollution Control Division. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition,



approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following, at a minimum:
 - a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse;
 - c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

Note: A departure from the acceptable baghouse pressure drop specified in section d)(1) shall be considered an excursion, not a deviation, if the permittee has taken corrective actions to restore operation of the emissions unit(s) and/or control equipment to its normal operation, and shall be reported as an excursion.

[Authority for term: OAC rules 3745-77-07(A)(3)(c) and 3745-15-03(C)]

- (2) The permittee shall submit semiannual written reports that identify, at a minimum:
 - a. all days during which any visible particulate emissions were observed from the stacks serving the emissions units;
 - b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving the emissions units; and
 - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stacks and/or visible emissions of fugitive dust.

[Authority for term: OAC rules 3745-77-07(A)(3)(c) and 3745-15-03(A)]



- (3) All reports shall be submitted in accordance with the reporting requirements of Part A: Standard Terms and Conditions of this permit. Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-15-03(A)]

f) Testing Requirements

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

- a. Emission Limitation:

Stack emissions of particulate less than 10 microns in diameter (PM₁₀) shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases and:

- i. 18.92 tons/yr for P107;
- ii. 2.65 tons/yr for P109;
- iii. 13.24 tons/yr for P112; and
- iv. 23.52 tons/yr for P116.

Applicable Compliance Method:

The gr/dscf emissions limitation was established based on the baghouse manufacturer's design specifications originally used in Permit-To-Install (PTI) 15-0144 issued 12/21/1981.

The ton/yr limitation was developed by multiplying the baghouse outlet grain loading of 0.01 gr/dscf by the maximum volumetric exhaust gas flow of the associated baghouse (in dscfm), and applying the appropriate conversion factors as follows:

For P107:

$$0.01 \text{ gr/dscf} \times 50,400 \text{ dscf/min} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr} \times 8760 \text{ hr/yr} \times 1 \text{ ton/2000 lb} = 18.92 \text{ tons PM}_{10}/\text{yr}$$

For P109:

$$0.01 \text{ gr/dscf} \times 7060 \text{ dscf/min} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr} \times 8760 \text{ hr/yr} \times 1 \text{ ton/2000 lb} = 2.65 \text{ tons PM}_{10}/\text{yr}$$

For P112:

$$0.01 \text{ gr/dscf} \times 35,270 \text{ dscf/min} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr} \times 8760 \text{ hr/yr} \times 1 \text{ ton/2000 lb} = 13.24 \text{ tons PM}_{10}/\text{yr}$$

For P116:

$$0.01 \text{ gr/dscf} \times 62,650 \text{ dscf/min} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr} \times 8760 \text{ hr/yr} \times 1 \text{ ton/2000 lb} = 23.52 \text{ tons PM}_{10}/\text{yr}$$



Therefore, if compliance is shown with the outlet grain loading allowable emissions limitation, compliance shall also be shown with the annual emissions limitation.

If required, compliance with the outlet grain loading limitation shall be determined through emissions testing performed in accordance with Method 201 or 201A of 40 CFR Part 51, Appendix M. Alternative US EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

b. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

c. Emission Limitation:

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

Applicable Compliance Method:

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

d. Emission Limitation:

For P107 and P109 each: 52.9 lbs/hr particulate emissions

For P112: 83.14 lbs/hr particulate emissions

For P116: 22.43 lbs/hr particulate emissions

Applicable Compliance Method:

For P107 and P109:

The allowable rate of particulate emissions E is calculated from the formula given in Table I in the Appendix of OAC rule 3745-17-11 using a process weight rate P of 117 tph steel as follows:

$$E = 55.0 (P)^{0.11} - 40.0 = 55.0 (117)^{0.11} - 40.0 = 52.9 \text{ lb/hr}$$



For P107:

The 52.9 lb/hr particulate emissions rate converts to 0.122 gr/dscf by dividing the mass flow rate by the maximum volumetric exhaust gas flow rate of 50,400 dscfm and applying the appropriate conversion factors as follows:

$$\frac{52.9 \text{ lb/hr}}{50,400 \text{ dscf/min}} \times 7000 \text{ gr/lb} \times 1 \text{ hr/60 min} = 0.122 \text{ gr/dscf}$$

For P109:

The 52.9 lb/hr particulate emissions rate converts to 0.874 gr/dscf by dividing the mass flow rate by the maximum volumetric exhaust gas flow rate of 7060 dscfm and applying the appropriate conversion factors as follows:

$$\frac{52.9 \text{ lb/hr}}{7060 \text{ dscf/min}} \times 7000 \text{ gr/lb} \times 1 \text{ hr/60 min} = 0.874 \text{ gr/dscf}$$

For P112:

The allowable rate of particulate emissions E is calculated from the formula given in Table I in the Appendix of OAC rule 3745-17-11 using a process weight rate P of 14.13 tph of material:

$$E = 14.10 (P)^{0.67} = 55.0 (14.13)^{0.11} - 40.0 = 83.14 \text{ lb/hr}$$

The 83.14 lb/hr particulate emissions rate converts to 0.275 gr/dscf by dividing the mass flow rate by the maximum volumetric exhaust gas flow rate of 35,270 dscfm and applying the appropriate conversion factors as follows:

$$\frac{83.14 \text{ lb/hr}}{35,270 \text{ dscf/min}} \times 7000 \text{ gr/lb} \times 1 \text{ hr/60 min} = 0.275 \text{ gr/dscf}$$

For P116:

The allowable rate of particulate emissions E is calculated from the formula given in Table I in the Appendix of OAC rule 3745-17-11 using a process weight rate P of 2.0 tph of material:

$$E = 14.10 (P)^{0.67} = 55.0 (2.0)^{0.11} - 40.0 = 22.43 \text{ lb/hr}$$

The 22.43 lb/hr particulate emissions rate converts to 0.042 gr/dscf by dividing the mass flow rate by the maximum volumetric exhaust gas flow rate of 62,650 dscfm and applying the appropriate conversion factors as follows:

$$\frac{22.43 \text{ lb/hr}}{62,650 \text{ dscf/min}} \times 7000 \text{ gr/lb} \times 1 \text{ hr/60 min} = 0.042 \text{ gr/dscf}$$

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

g) Miscellaneous Requirements

- (1) None.



10. Emissions Unit Group -Soaking Pits 1-4 and 5-8: P104,P105,

| EU ID | Operations, Property and/or Equipment Description |
|-------|---|
| P104 | Soaking Pits #1-#4 to heat steel ingots, rated at 80 mmBtu/hr (20 mmBtu/hr each) firing natural gas |
| P105 | Soaking Pits #5-#8 to heat steel ingots, rated at 80 mmBtu/hr (20 mmBtu/hr each) firing natural gas |

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|---|
| a. | OAC rule 3745-31-05(A)(3) (Administrative Permit Modification to PTI 15-0144 to be issued) [Best Available Technology (BAT)] | Particulate emissions less than 10 microns in diameter (PM ₁₀) shall not exceed 0.02 lb/mmBtu and 7.01 tons/year. Sulfur dioxide (SO ₂) emissions shall not exceed 0.0006 lb/mmBtu and 0.21tons/year. Nitrogen oxides (NO _x) emissions shall not exceed 0.50 lb/mmBtu and 175.20 tons/year. Carbon monoxide (CO) emissions shall not exceed 0.04 lb/mmBtu and 14.02 tons/year. See b)(2)a., b)(2)b., b)(2)c., b)(2)d., and c)(1). |
| b. | OAC rule 3745-17-07(A)(1) | Exempt. See b)(2)e. |
| c. | OAC rule 3745-17-11 | Exempt. See b)(2)f. |
| d. | OAC rule 3745-17-10 | Exempt. See b)(2)g. |
| e. | OAC rule 3745-18-06(E) OAC rule 3745-18-82(A) | Exempt. See b)(2)g. and b)(2)h. |

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas firing only and compliance with the terms and conditions of this permit.
- b. All particulate emissions are generated from natural gas combustion and are assumed to be less than 10 microns in diameter (designated as PM₁₀).
- c. The uncontrolled potential emissions of VOC when firing natural gas in these emissions units is negligible (less than 10 pounds per day each), and therefore emissions limits for this pollutant have not been established.
- d. The emissions limitations for PM₁₀, SO₂, NO_x, and CO are based on each emission unit's potential to emit. Therefore, no monitoring, record keeping, and reporting requirements are necessary to ensure ongoing compliance with these emissions limitations.
- e. These emissions units are 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 units are not subject to the requirements of OAC rule 3745-17-11.
- f. The burning of natural gas is the only source of particulate emissions from these emissions units. The uncontrolled mass rate of particulate emissions from each emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(4) because the process weight that causes any emissions of particulate matter is equal to zero.
- g. These emissions units are designed such that the products of combustion come into direct contact with materials being processed and therefore do not meet the definition of "fuel burning equipment" given in OAC rules 3745-17-01(B)(5) and 3745-18-01(B)(4). They are, therefore, exempt from the emission limitations and control requirements contained in OAC rule 3745-17-10 for fuel burning equipment and subject to the requirements in OAC rule 3745-18-06 as process equipment.
- h. The burning of natural gas is the only source of sulfur dioxide from these emissions units. Pursuant to OAC rule 3745-18-06(C), these emissions units are exempt from OAC rules 3745-18-06(E) and 3745-18-82 because the process weight input (excludes gaseous fuels) that causes any emissions of sulfur dioxide is equal to zero, which is less than 1,000 lbs/hour.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in these emissions units.

[Authority for term: OAC rule 3745-77-07(A)(1) and Administrative Permit Modification to PTI 15-0144 to be issued]

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: OAC rule 3745-77-07(C)(1) and Administrative Permit Modification to PTI 15-0144 to be issued]

- (2) Records shall be maintained of the total annual amount of natural gas burned in these emissions units.

[Authority for term: OAC rule 3745-77-07(C)(1) and Administrative Permit Modification to PTI 15-0144 to be issued]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify, at a minimum, each day when a fuel other than natural gas was burned in these emissions units

[Authority for Term: OAC rules 3745-77-07(A)(3)(c) and 3745-15-03(C)]

- (2) All reports shall be submitted in accordance with the reporting requirements of Part A: Standard Terms and Conditions of this permit. Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-15-03(A)]

f) Testing Requirements

- (1) Compliance with the emissions limitations and/or control requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Particulate emissions less than 10 microns in diameter (PM₁₀) shall not exceed 0.02 lb/mmBtu and 7.01 tons/year.



Applicable Compliance Method:

The lb/mmBtu emissions limitation was provided by the facility in their permit application for their original PTI 15-0144 issued 12/21/1981 for this emissions unit.

The ton per year emission limitation was developed by multiplying the lb/mmBtu emission limitation by the rated heat input of 80 mmBtu/hr times the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, compliance with the lb/mmBtu emission limitation demonstrates compliance with the annual emission limitation.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emissions limitation through emissions testing performed in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

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

b. Emission Limitation:

Nitrogen oxides (NOx) emissions shall not exceed 0.50 lb/mmBtu and 175.20 tons/year.

Applicable Compliance Method:

The lb/mmBtu emissions limitation was provided by the facility in their permit application for their modified PTI 15-0144 issued 01/10/1990 for this emissions unit.

The ton per year emission limitation was developed by multiplying the lb/mmBtu emission limitation by the rated heat input of 80 mmBtu/hr times the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the lb/mmBtu allowable emission limitation, compliance shall also be shown with the annual emission limitation.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 7 or 7E. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

c. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 0.04 lb/mmBtu and 14.02 tons/year.



Applicable Compliance Method:

The lb/mmBtu emissions limitation was provided by the facility in their permit application for their original PTI 15-0144 issued 12/21/1981 for this emissions unit.

The ton per year emission limitation was developed by multiplying the lb/mmBtu emission limitation by the rated heat input of 80 mmBtu/hr times the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the lb/mmBtu allowable emission limitation, compliance shall also be shown with the annual emission limitation.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 10. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division

d. Emission Limitation:

Sulfur dioxide (SO₂) emissions shall not exceed 0.0006 lb/mmBtu and 0.21tons/year.

Applicable Compliance Method:

The lb/mmBtu emissions limitation was established by converting the 0.6 lb/mmscf emission factor for SO₂ from natural gas combustion from AP-42 "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (07/98) by dividing the factor with the heat content referenced in that table as shown below.

$$(0.6 \text{ lb/mmscf}) / (1020 \text{ Btu/scf}) = 0.0006 \text{ lb/mmBtu.}$$

The ton per year emission limitation was developed by multiplying the lb/mmBtu emission limitation by the rated heat input of 80 mmBtu/hr times the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the lb/mmBtu allowable emission limitation, compliance shall also be shown with the annual emission limitation.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 18, 25, or 25A. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division

- (2) The permittee shall conduct, or have conducted, emission testing for Emissions Unit P104 in accordance with the following requirements. The results of the testing for P104 shall be considered representative of the emissions from P105, which is an identical unit:



- a. The emissions testing shall be conducted within 9 months after issuance of the permit (following the effective date of the Title V permit).
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NO_x and CO, in the appropriate averaging period(s).
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rates:
 - i. for NO_x, Method 7 or 7E of 40 CFR Part 60, Appendix A; and
 - ii. for CO, Method 10 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

- d. The tests shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
- e. The weight of steel processed in each soak pit shall be monitored and recorded for each test-run.
- f. The total natural gas fired in each soak pit for each test-run shall be recorded and at least one sample of the natural gas fired during the 3 test-runs shall be collected and analyzed to determine its heating value in Btu/scf.
- g. Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).
- h. Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.



Draft Title V Permit
TimkenSteel Corporation - Faircrest Steel Plant
Permit Number: P0103991
Facility ID: 1576222001
Effective Date: To be entered upon final issuance

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

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

- g) Miscellaneous Requirements
 - (1) None.



11. Emissions Unit Group -Soaking Pits 11 and 12: P123,P124,

| EU ID | Operations, Property and/or Equipment Description |
|-------|--|
| P123 | Soaking Pit #12 to heat steel ingots rated at 20 mmBtu/hr, equipped with oxyfuel (100% oxygen-enriched natural gas) fired burners, and vented through stack P123S-1. |
| P124 | Soaking Pit #11 to heat steel ingots rated at 20 mmBtu/hr, equipped with oxyfuel (100% oxygen-enriched natural gas) fired burners, and vented through stack P124S-1. |

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|---|
| a. | OAC rule 3745-31-05(A)(3) (Administrative Permit Modification to PTI 15-1157 to be issued) (Administrative Modification to PTI 15-1162 to be issued) [Best Available Technology (BAT)] | PM ₁₀ emissions shall not exceed 0.130 lbs/hr and 0.569 tons/yr. See b)(2)h. Volatile organic compound (VOC) emissions shall not exceed 0.122 lb/hr and 0.534 tons/yr Nitrogen oxides (NOx) emissions shall not exceed 2.940 lbs/hr and 12.877 tons/yr. Carbon monoxide (CO) emissions shall not exceed 0.740 lb/hr and 3.241 tons/yr. See b)(2)a., b)(2)b., b)(2)c., and c)(1). |
| b. | OAC rule 3745-17-07(A)(1) | Exempt. See b)(2)d. |
| c. | OAC rule 3745-17-11 | Exempt. See b)(2)e. |
| d. | OAC rule 3745-17-10 | Exempt. See b)(2)f. |
| e. | OAC rule 3745-18-06(E) OAC rule 3745-18-82(A) | Exempt. See b)(2)f. and b)(2)g. |

- (2) Additional Terms and Conditions
- a. The Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of oxyfuel (100% oxygen-enriched natural gas) firing only and compliance with the terms and conditions of this permit.
 - b. The emissions limitations for PM₁₀, VOC, NO_x, and CO are based on each emission unit's potential to emit. Therefore, no monitoring, record keeping, and reporting requirements are necessary to ensure ongoing compliance with these emissions limitations.
 - c. The uncontrolled potential emissions of sulfur dioxide (SO₂) when firing oxyfuel in these emissions units is negligible (less than 10 pounds per day each), and therefore emissions limits for this pollutant have not been established.
 - d. These emissions units are 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 units are not subject to the requirements of OAC rule 3745-17-11.
 - e. The burning of oxyfuel is the only source of particulate emissions from these emissions units. The uncontrolled mass rate of particulate emissions from each emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(4) because the process weight that causes any emissions of particulate matter is equal to zero.
 - f. These emissions units are designed such that the products of combustion come into direct contact with materials being processed and therefore do not meet the definition of "fuel burning equipment" given in OAC rules 3745-17-01(B)(5) and 3745-18-01(B)(4). They are, therefore, exempt from the emission limitations and control requirements contained in OAC rule 3745-17-10 for fuel burning equipment and subject to the requirements in OAC rule 3745-18-06 as process equipment.
 - g. The burning of oxyfuel is the only source of sulfur dioxide from these emissions units. Pursuant to OAC rule 3745-18-06(C), these emissions units are exempt from OAC rules 3745-18-06(E) and 3745-18-82 because the process weight input (excludes gaseous fuels) that causes any emissions of sulfur dioxide is equal to zero, which is less than 1,000 lbs/hour.
 - h. All particulate emissions are assumed to be less than 10 microns in diameter and are designated as PM₁₀.

c) Operational Restrictions

- (1) The permittee shall burn only oxyfuel (100% oxygen-enriched natural gas) as fuel in these emissions units.

[Authority for term: OAC rule 3745-77-07(A)(1), Administrative Permit Modification to PTI 15-1157 to be issued, Administrative Permit Modification to PTI 15-1162 to be issued]

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: OAC rule 3745-77-07(C)(1) and Administrative Permit Modification to PTI 15-1157 & PTI 15-1162 to be issued]

- (2) Records shall be maintained of the total annual amount of oxyfuel burned in these emissions units.

[Authority for term: OAC rule 3745-77-07(C)(1) and Administrative Permit Modification to PTI 15-1157 & PTI 15-1162 to be issued]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify, at a minimum, each day when a fuel other than oxyfuel was burned in these emissions units.

[Authority for term: OAC rules 3745-77-07(A)(3)(c) and 3745-15-03(C)]

- (2) All reports shall be submitted in accordance with the reporting requirements of Part A: Standard Terms and Conditions of this permit. Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-15-03(A)]

f) Testing Requirements

- (1) Compliance with the emission limitations and/or control requirements specified in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Filterable PM₁₀ emissions shall not exceed 0.130 lbs/hr and 0.569 tons/yr.

Applicable Compliance Method:

The hourly emissions limitation was established by multiplying the facility provided emissions factor of 0.0065 lb PM₁₀/mmBtu of heat input by the maximum heat input of 20 mmBtu/hr. The facility provided the emissions factor in



the application for the original PTI 15-1157 issued 11/30/1994 for P123 and PTI 15-1162 issued 01/25/1995 for P124.

The ton per year emission limitation was developed by multiplying the short-term allowable PM₁₀ emission limitation by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

If required, the permittee shall demonstrate compliance with the hourly emissions limitation through emissions testing performed in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

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

b. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 0.122 lb/hr and 0.534 tons/yr.

Applicable Compliance Method:

The hourly emissions limitation was established by multiplying the facility provided emissions factor of 0.0061 lb VOC/mmBtu of heat input by the maximum heat input of 20 mmBtu/hr. The facility provided the emissions factor in the application for the original PTI 15-1157 issued 11/30/1994 for P123 and PTI 15-1162 issued 01/25/1995 for P124.

The ton per year emission limitation was developed by multiplying the short-term allowable VOC emission limitation by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

If required, the permittee shall demonstrate compliance with the hourly emissions limitation through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 18, 25, or 25A. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

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

c. Emission Limitation:

Nitrogen oxides (NOx) emissions shall not exceed 2.940 lbs/hr and 12.877 tons/yr.



Applicable Compliance Method:

The hourly emissions limitation was established by multiplying the facility provided emissions factor of 147 lb NO_x/mmBtu of heat input by the maximum heat input of 20 mmBtu/hr. The facility provided the emissions factor in the application for the original PTI 15-1157 issued 11/30/1994 for P123 and PTI 15-1162 issued 01/25/1995 for P124.

The ton per year emission limitation was developed by multiplying the short-term allowable NO_x emission limitation by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

If required, the permittee shall demonstrate compliance with the hourly emissions limitation through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 7 or 7E. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

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

d. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 0.740 lb/hr and 3.241 tons/yr.

Applicable Compliance Method:

The hourly emissions limitation was established by multiplying the facility provided emissions factor of 0.037 lb CO/mmBtu of heat input by the maximum heat input of 20 mmBtu/hr. The facility provided the emissions factor in the application for the original PTI 15-1157 issued 11/30/1994 for P123 and PTI 15-1162 issued 01/25/1995 for P124.

The ton per year emission limitation was developed by multiplying the short-term allowable CO emission limitation by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

If required, the permittee shall demonstrate compliance with the hourly emissions limitation through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 10. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

- (2) The permittee shall conduct, or have conducted, emission testing for Emissions Unit P123 in accordance with the following requirements. The results of the testing for P123 shall be considered representative of the emissions from P124, which is an identical unit:



- a. The emissions testing shall be conducted within 9 months after issuance of the permit (following the effective date of the Title V permit).
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NO_x and CO, in the appropriate averaging period(s).
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rates:
 - i. for NO_x, Method 7 of 40 CFR Part 60, Appendix A; and
 - ii. for CO, Method 10 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

- d. The tests shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
- e. The weight of steel processed in each soak pit shall be monitored and recorded for each test-run.
- f. The total oxyfuel fired in each soak pit for each test-run shall be recorded and at least one sample of the natural gas fired during the 3 test-runs shall be collected and analyzed to determine its heating value in Btu/scf.
- g. Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).
- h. Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.



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

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

- g) Miscellaneous Requirements
 - (1) None.