



09/10/2026

Michelle Hall
Charter Manufacturing Company, Inc.
4300 E. 49th Street
Cuyahoga Heights, OH 44125

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL

Facility ID: 1318171623
Permit Number: P0141210
Permit Type: Administrative Modification
County: Cuyahoga

Yes	TOXIC REVIEW
Yes	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
Yes	NSPS
No	NESHAPS
No	NETTING
Yes	MAJOR NON-ATTAINMENT
Yes	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio Environmental Protection Agency (Ohio EPA) [Weekly Review and Public Notices](#) website. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Ohio EPA document search webpage: [eDocument Search](#). 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:

Andrea Moore
Permitting Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Cleveland Division of Air Quality
2nd Floor
75 Erieview Plaza
Cleveland, OH 44114

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published on the Ohio EPA [Weekly Review and Public Notices](#) website. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Cleveland Division of Air Quality at (216)664-2297.

Sincerely,

Robert Hodanbosi
Chief, Division of Air Pollution Control

cc: U.S. EPA Region 5 - Via E-Mail Notification
CDAQ; Pennsylvania; Canada

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: [Weekly Review and Public Notices | Ohio Environmental Protection Agency](#) or Hearing Clerk, Ohio EPA, 50 W. Town St., Columbus, Ohio 43215. Ph: 614-644-3037 email: HClerk@epa.ohio.gov

Draft Air Pollution Permit-to-Install Administrative Modification

Charter Manufacturing Company, Inc.
4300 East 49th Street
Cuyahoga Heights, OH 44125-1004

ID#: P0141210

Date of Action: 09/10/2026

Permit Desc: Agency-initiated administrative modification to incorporate RACT standards. Pursuant to Part D of Title I of the Clean Air Act (CAA), Ohio EPA is required to establish a State Implementation Plan (SIP) for the attainment and maintenance of the NAAQS. The above-mentioned permit is a part of Ohio's SIP for attainment and maintenance of the 2015 ozone NAAQS and will be submitted to United States Environmental Protection Agency (U.S. EPA) as a modification of the SIP.

The permit can be accessed electronically and comments may be submitted at: <https://ohioepa.commentinput.com> - Search by entering the permit P0141210 in the "Search Projects" search box.

The public comment period will run until 10/12/2026 at 11:59 PM.

Permit Strategy Write-Up

1. Check all that apply:

☐ Synthetic Minor Determination **N/A**

☐ Netting Determination **N/A**

2. Source Description:

Charter Manufacturing Company is a steel making facility using an Electric Arc Furnace (P900) for the melting of scrap steel and using a Direct Evacuation Control (system) with adjustable gap for capture and control of CO and VOC emissions, and a baghouse for control of particulate emissions.

As required by the reclassification to serious nonattainment for ozone under the 2015 ozone National Ambient Air Quality Standards (NAAQS) promulgated by U.S. EPA, this facility has submitted a VOC Reasonably Available Control Technology (RACT) study on March 31, 2026 (subsequently revised on 4/30/2026, 6/11/2026, 7/17/2026, and 8/6/2026) to address the feasibility of controlling VOC emissions from the electric arc furnace. This facility has no prior existing source-specific VOC RACT requirements under OAC rule 3745-21-11(B).

This PTI administrative modification includes the implementation of the proposed VOC RACT requirements for emissions unit P900 identified in the August 2026 revision of the RACT study. The facility-wide Section B. of this permit identifies the VOC RACT limit for P900 established under OAC rule 3745-21-11(B), and the applicable rules table in Section C.1. implements these under an OAC rule 3745-31-05(D) federally enforceable restriction.

Pursuant to Part D of Title I of the Clean Air Act (CAA), Ohio EPA is required to establish a State Implementation Plan (SIP) for the attainment and maintenance of the NAAQS. This permit is part of Ohio's SIP for attainment and maintenance of the 2015 ozone NAAQS and will be submitted to the United States Environmental Protection Agency (U.S. EPA) as a modification of the SIP.

3. Facility Emissions and Attainment Status:

Charter Manufacturing Company is a Title V facility located in Cuyahoga County.

Cuyahoga County was designated as "serious" nonattainment for the 2015 ozone NAAQS but is now a maintenance county. The county is currently designated attainment for all NAAQS (criteria) pollutants which include ozone, PM_{2.5}, PM₁₀, CO, NO₂, lead and SO₂.

4. Source Emissions:

The affected emissions unit that will be implementing the VOC RACT requirement is the electric arc furnace (P900). The VOC RACT determination for this emissions unit under OAC rule 3745-21-11(B) is the following:

- a) VOC RACT emission limit of 22.0 lbs/hr for emissions unit P900;
- b) Use of the current Ohio EPA-approved scrap management plan to help minimize VOC emissions; and
- c) Utilizing the current Direct Evacuation Control (DEC) system with adjustable air gap and water-cooled elbow and duct that allows for efficient post-furnace combustion of VOC emissions.



5. Conclusion:

This permit modification establishes the VOC RACT emission limit as proposed by the Charter Manufacturing Company in their VOC RACT study as part of the requirements for the 2015 ozone NAAQs nonattainment and maintenance areas under the reclassification to serious nonattainment for the Cleveland area. The VOC RACT emission limit established in this permit shall apply immediately upon final issuance of this permit (P0141210).

6. Please provide additional notes or comments as necessary:

None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
PM _{2.5} (filterable)	13.92
PM ₁₀ (filterable)	14.28
PM (filterable)	18.84
PM/PM ₁₀ /PM _{2.5} (condensable)	12.24
NO _x	138.96
VOC	84.24
lead	0.17
SO ₂	314.0
CO	1364.20



**Environmental
Protection
Agency**

DRAFT

Division of Air Pollution Control

Permit-to-Install

for

Charter Manufacturing Company, Inc.

Facility ID:	1318171623
Permit Number:	P0141210
Permit Type:	Administrative Modification
Issued:	09/10/2026
Effective:	To be entered upon final issuance

Division of Air Pollution Control
Permit-to-Install
for
Charter Manufacturing Company, Inc.

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Authorization

Facility ID: 1318171623
Facility Description: Steel Billet manufacturing.
Application Number(s): M0008872
Permit Number: P0141210
Permit Type: Permit-To-Install
Permit Fee: \$0.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 09/10/2026
Effective Date: To be entered upon final issuance

This document constitutes issuance of a Permit-to-Install for the emissions unit(s) identified on the following page to:

Charter Manufacturing Company, Inc.
4300 East 49th Street
Cuyahoga Heights, OH 44125-1004

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

Cleveland Division of Air Quality
2nd Floor
75 Erieview Plaza
Cleveland, OH 44114
(216)664-2297

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

John Logue
Director

Authorization (continued)

Permit Number: P0141210

Permit Description: Agency-initiated administrative modification to incorporate RACT standards. Pursuant to Part D of Title I of the Clean Air Act (CAA), Ohio EPA is required to establish a State Implementation Plan (SIP) for the attainment and maintenance of the NAAQS. The above-mentioned permit is a part of Ohio's SIP for attainment and maintenance of the 2015 ozone NAAQS and will be submitted to United States Environmental Protection Agency (U.S. EPA) as a modification of the SIP.

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

Emissions Unit ID:	P900
Company Equipment ID:	Electric Arc Furnace (EAC)
Superseded Permit Number:	P0120585
General Permit Category and Type:	Not Applicable

List of Commonly Used Abbreviations

AP-42 = U.S. EPA's Compilation of Air Pollution Emissions Factors	HVLP = high volume, low pressure	PER = Permit Evaluation Report
ASTM = American Society for Testing and Materials	LAER = lowest achievable emission rate	PM = particulate matter
BACT = Best Available Control Technology	lb(s)/hr = pound(s) per hour	PM ₁₀ = particulate matter with an aerodynamic diameter less than or equal to 10 microns
BAT = Best Available Technology	LDAR = leak detection and repair	PM _{2.5} = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
CAA = Clean Air Act	LPG = liquefied petroleum gas/propane	ppb = parts per billion
CAM = compliance assurance monitoring	MACT = maximum achievable control technology	ppm = parts per million
CEMS = continuous emissions monitoring system	MAGLC = maximum acceptable ground level concentration	PSD = Prevention of Significant Deterioration
CFC = chlorofluorocarbon	mg/m ³ = milligrams per cubic meter	psi = pounds per square inch
CFR = Code of Federal Regulations	MM = million	psia = pounds per square inch absolute
CH ₄ = methane	MMBtu = million British Thermal Units	PTE = potential-to-emit
CI = compression ignition	MSDS = material safety data sheet	PTI = Permit-to-Install
CO = carbon monoxide	MSW = municipal solid waste	PTIO = Permit-to-Install and Operate
CO ₂ = carbon dioxide	NAAQS = National Ambient Air Quality Standard	PTO = Permit-to-Operate
COM = continuous opacity monitor	NESHAP = National Emission Standard for Hazardous Air Pollutants	PWR = process weight rate
DAPC = Division of Air Pollution Control	NG = natural gas	RACM = reasonably available control measures
DO/LAA = District Office/Local Air Agency	ng/m ³ = nanograms per cubic meter	RACT = reasonably available control technology
dscf = dry standard cubic foot	NH ₃ = ammonia	RATA = relative accuracy test audit
EAC = emissions activity category	NMHC = non-methane hydrocarbons	RTO = regenerative thermal oxidizer
eDocs = electronic documents database	NMOC = non-methane organic compound	SB265 = Senate Bill 265
ERAC = Environmental Review Appeals Commission	NO = nitrogen oxide	scfm = standard cubic feet per minute
ESP = electrostatic precipitator	NO ₂ = nitrogen dioxide	SI = spark ignition
EU = emissions unit	NO _x = nitrogen oxides	SIP = State Implementation Plan
FEPTIO = Federally Enforceable Permit-to-Install and Operate	NSPS = New Source Performance Standard	SO ₂ = sulfur dioxide
FER = Fee Emissions Report	NSR = New Source Review	SSMP = startup, shutdown, and malfunction plan
FR = Federal Register	NTV = Non-Title V	TDS = total dissolved solids
GACT = generally achievable control technology	O&M = operation and maintenance	TLV = threshold limit value
GHG = greenhouse gases	OAC = Ohio Administrative Code	TO = thermal oxidizer
gr/dscf = grains per dry standard cubic foot	OC = organic compound	TPH = ton(s) per hour
H ₂ S = hydrogen sulfide	Ohio EPA = Ohio Environmental Protection Agency	TPY = ton(s) per year
H ₂ SO ₄ = sulfuric acid	ORC = Ohio Revised Code	TSP = total suspended particulates
HAP = hazardous air pollutant	Pb = lead	VE = visible particulate emissions
HCl = hydrogen chloride	PBR = Permit-By-Rule	VMT = vehicle miles traveled
HF = hydrogen fluoride	PCB = polychlorinated biphenyl	VOC = volatile organic compound
Hg = mercury	PE = particulate emissions	WPP = work practice plan
hp = horsepower	PEMS = predictive emissions monitoring system	µg/m ³ = micrograms per cubic meter

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.2.a), Severability Clause
 - (2) Standard Term and Condition A.3.c) through A. 3.e), General Requirements
 - (3) Standard Term and Condition A.6.c), Compliance Requirements
 - (4) Standard Term and Condition A.9., Reporting Requirements
 - (5) Standard Term and Condition A.10., Applicability
 - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A.14., Public Disclosure
 - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A.16., Fees
 - (10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

- a) 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.
- b) All terms and conditions designated in parts B. and C. of this permit are federally enforceable as a practical matter, if they 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 and the state and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under state law only, only if specifically identified in this permit as such.

3. 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 re-issuance, or modification.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.



- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying 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.

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (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.
- 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, 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.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Cleveland Division of Air Quality.
 - (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Cleveland Division of Air Quality. The written 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. See A.15. below if no deviations occurred during the quarter.



- (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Cleveland Division of Air Quality every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semiannual report, which states that no deviations occurred during that period.
 - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Cleveland Division of Air Quality in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

- a) 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 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 appropriate Ohio EPA District Office or contracted local air agency, 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 electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

Any document (including reports) required to be submitted and required by a federally applicable requirement in this 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 ORC section 3704.08.
 - (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 Cleveland Division of Air Quality 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.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Cleveland Division of Air Quality.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will



be taken, shall be submitted to the Cleveland Division of Air Quality. 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.)

10. Applicability

This permit-to-install is applicable only to the emissions unit(s) identified in the permit-to-install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s) not exempt from the requirement to obtain a permit-to-install.

11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended once by twelve months if application is made to the Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized 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 authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a



subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shut down emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or any other reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.

13. Construction Compliance Certification

The applicant shall identify the following dates in the "Air Services" facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

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

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.

16. 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. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed. The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

18. Risk Management Plans

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

19. 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.

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 emissions unit contained in this permit is subject to 40 CFR Part 63, Subpart YYYYY: P900. The complete MACT requirements, including the General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://www.ecfr.gov> or by contacting the Cleveland Division of Air Quality.
3. For the dust-handling system located at this facility, including dust-handling equipment associated with P900 and F004, the permittee shall not discharge into the atmosphere any gases that exhibit 10 percent opacity or greater. In accordance with 40 CFR Part 60, Subpart AAa, the definition of "dust-handling system" is as follows:

Dust-handling system means 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.

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in 40 CFR Part 60 Subpart AAa.
4. This facility has emission limitations that have been established in previous permits for the total amount of emissions that are emitted through the Melt Shop baghouse. These emission limits (with the exception of PM_{2.5}) have been established as best available control technology (BACT) through OAC rules 3745-31-10 through 20 in accordance with the Prevention of Significant Deterioration requirements, and lowest achievable emission rate (LAER) for SO₂ through OAC rules 3745-31-21 through 27 in accordance with the Nonattainment New Source Review requirements. These BACT limits were updated through permit P0120585 to reflect the changed emission profile resulting from the Melt Shop Expansion Project. The BACT and LAER limits included in this permit supersede the limits in PTI #13-04176. The emission limits for PM_{2.5} have been established as BAT through OAC rule 3745-31-05(A)(3).
 - a) The emissions from emissions units P032-P038, P041, P048, and P900-P902 that vent to the Melt Shop Baghouse shall not exceed the following BACT/BAT emission limits from the baghouse outlet:
 - PM emissions shall not exceed 4.31 lbs/hr and 0.00069 grains/dscf (filterable)
 - PM₁₀ emissions shall not exceed 3.27 lbs/hr and 0.00052 grains/dscf (filterable)
 - PM_{2.5} emissions shall not exceed 3.19 lbs/hr and 0.00051 grains/dscf (filterable)
 - Nitrogen oxide (NO_x) emissions shall not exceed 47.09 lbs/hr
 - Volatile organic compounds (VOC) emissions shall not exceed 22.71 lbs/hr
 - Lead (Pb) emissions shall not exceed 0.03 lb/hr
 - Mercury (Hg) emissions shall not exceed 0.052 lb/hr
 - 3 percent opacity, as a 6-minute average, from the Melt Shop baghouse stack exit



These lb/hr, gr/dscf, and opacity BACT limits were originally established through the PSD PTI 13-04176 issued on 6/10/2004, with the exception of the PM_{2.5} limit which was first included as part of permit modification P0120585 as a BAT limit. The ton/year limits have been eliminated since the annual emissions increased as a result of permit modification P0120585. The PM, PM₁₀, PM_{2.5}, and lead limits have been included and adjusted based on updated information from the permittee in their permit application. These limits supersede the limits in PTI 13-04176.

- b) The emissions from emissions units P032-P038, P041, P043, P048, and P900-P902 that vent to the Melt Shop Baghouse shall not exceed the following BACT/LAER (for SO₂) from the baghouse outlet:

Sulfur dioxide (SO₂) emissions shall not exceed 166.16 lbs/hr, 1.51 lbs/ton, and 314 tons per year per rolling 12-month period.

For purposes of demonstrating compliance with these SO₂ emissions limits, the permittee has developed the following groupings of steel grades:

- (1) “low-sulfur steel grades” – no sulfur addition and carbon specification less than 0.6% carbon per heat with emission factor in lb SO₂/ton of steel determined from the most recent stack test that demonstrated compliance;
- (2) “mid-sulfur steel grades” – sulfur addition to achieve a sulfur specification for the steel of less than 0.1% and carbon specification greater than or equal to 0.6% carbon per heat with emission factor in lb SO₂/ton of steel determined from the most recent stack test that demonstrated compliance; and
- (3) “high-sulfur steel grades” – sulfur addition to achieve a sulfur specification for the steel of greater than or equal to 0.1% and less than or equal to 0.35% with emission factor in lb SO₂/ton of steel determined from the most recent stack test that demonstrated compliance.

The terms “low-sulfur steel grades”, “mid-sulfur steel grades,” and “high-sulfur steel grades” are not industry standard terms, but rather reflect the relative magnitude of SO₂ emissions resulting from the addition of sulfur and/or carbon to meet product specifications.

- c) The emissions from emissions units P032-P038, P041, P048, and P900-P902 that vent to the Melt Shop Baghouse shall not exceed the following BACT limit (for CO) from the baghouse outlet:

Carbon monoxide (CO) emissions shall not exceed 397.06 lbs/hr

- d) Visible emissions of fugitive dust from the Melt Shop building shall not exceed 6 percent opacity, as a 6-minute average.

This visible emission limitation was established as BACT through the PSD PTI 13-04176 and remains in effect.

- e) Compliance with the lb/hr, lb/ton, and gr/dscf emission limits above shall be based upon the results of the emission testing specified in B.4.g) below. The emission testing shall be performed in accordance with the requirements of 40 CFR Part 60 Subpart AAa and 40 CFR Part 63 Subpart YYYYY
- f) Compliance with the stack and fugitive opacity limitations above shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B).



- g) Emissions testing to demonstrate compliance with the melt shop particulate, VOC, and lead (Pb) limits shall be conducted in accordance with the test schedule set forth in the permittee's Title V permit (approximately every 2.5 years after issuance of the Title V permit).

Emission testing shall be conducted to verify the emission factors in lb SO₂/ton for low-sulfur grade, mid-sulfur grade, and high-sulfur steel grade identified in term B.4.b) above, and to demonstrate compliance with the SO₂ limit of 166.16 lbs/hr and 1.51 lb/ton (when producing "high-sulfur steel grade") approximately every 2.5 years in accordance with the permittee's Title V permit.

The test(s) shall be conducted while emissions units P032-P038, P041, P048, and P900-P902 are operating simultaneously at or near their maximum capacity, unless otherwise specified or approved by the Cleveland DAQ. The tests shall be conducted in accordance with the requirements of 40 CFR Part 60.275a.

For the sulfur dioxide testing, the permittee shall perform three test runs for each category of steel that is produced: low-sulfur, mid-sulfur, and high-sulfur. The tests shall be performed for a grade of steel within each "bucket" category (low, mid, high) with the highest upper bound sulfur content customer specification being produced for the category being tested for the duration of the test (provided there is a customer order for such grade of steel).

During performance tests, the permittee shall not add gaseous diluents to the effluent gas stream after the fabric in any pressurized fabric filter collector unless the amount of dilution is separately determined and considered in the determination of emissions.

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

Methods 1 through 5 of 40 CFR Part 60, Appendix A for particulates;

Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A for SO₂;

Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A for lead (Pb); and

Methods 1 through 4 and 25 or 25a of 40 CFR Part 60, Appendix A for VOC.

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

The performance test protocol (i.e., Ohio EPA Intent to Test) shall specify the baghouse pressure set point that will be utilized during the test. The performance test report of results shall include data that proves the baghouse was tested at the requested set point.

During the emissions testing, the emissions unit shall be operated under operational conditions approved in advance by the Cleveland DAQ. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.), or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under "worst case" conditions expected during the life of the permit. As part of the information provided in the "Intent to Test" notification form described below, the permittee shall provide a description of the emissions unit operational conditions they will meet during the emissions testing and describe why they believe "worst case" operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the Cleveland DAQ that the



proposed operating conditions constitute “worst case”. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ 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 Cleveland DAQ.

- h) Compliance with the annual sulfur dioxide emission limit in B.4.b) for emissions units P032 – P038, P041, P043, P048, and P900 – P902 combined shall be demonstrated using the following equation:

Total annual SO₂ emissions per rolling 12-months = ((lb SO₂/ton steel * a) + (lb SO₂/ton steel * b) + (lb SO₂/ton steel * c)) / (2000 lbs/ton) ≤ 314 tons SO₂ per rolling 12-months

Where:

a = tons of low-sulfur steel grades produced by the melt shop in the preceding 12-month period

b = tons of mid-sulfur steel grades produced by the melt shop in the preceding 12-month period

c = tons of high-sulfur steel grades produced by the melt shop in the preceding 12-month period

The permittee shall use the lb SO₂/ton steel emission factor determined from the most recent performance test that demonstrated compliance in the above formula for each category of steel. The following emission factors were determined from stack testing:

0.103 lb SO₂/ton steel for low-sulfur grade steel (March 2018 stack test);

0.23 lb SO₂/ton steel for mid-sulfur grade steel (March 2018 stack test); and

1.246 lb SO₂/ton steel for high-sulfur grade steel (June 2023 stack test).

The permittee shall maintain monthly records for the melt shop of the tons of steel produced for each category of steel (i.e., low-sulfur, mid-sulfur, and high-sulfur) for each calendar month, the rolling, 12-month summation of the steel produced for each category, and the rolling, 12-month SO₂ emission totals.

The permittee shall submit quarterly deviation (excursion) reports that identify the following:

All exceedances of the total annual rolling 12-month SO₂ emission limitation for emissions units P032 – P038, P041, P043, P048, and P900 – P902 combined.



The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

5. OAC rule 3745-21-11(B) VOC RACT Requirements

As required by the reclassification to serious nonattainment for ozone under the 2015 ozone National Ambient Air Quality Standards (NAAQS) promulgated by U.S. EPA, and pursuant to OAC rule 3745-21-11(B) and the VOC Reasonable Available Control Technology (RACT) Study submitted by The Charter Manufacturing Company on March 31, 2026 (subsequently revised on 4/30/2026, 6/11/2026, 7/17/2026, and 8/6/2026):

“The Charter Manufacturing Company” (Facility ID: 1318171623) or any subsequent owner or operator of “The Charter Manufacturing Company” facility located at 4300 East 49th Street, Cuyahoga Heights, Ohio shall comply with the following requirements for emissions unit P900:

- a) The VOC emissions shall not exceed 22.0 lbs/hr from emissions unit P900. This emission limit applies immediately upon final issuance of this permit (P0141210).
- b) Current use of the Ohio EPA-approved scrap management plan to help minimize VOC emissions – see Section C term c)(5) for emissions unit P900.
- c) Current use of a Direct Evacuation Control (DEC) system with adjustable air gap and water-cooled elbow and duct allowing for efficient post-furnace VOC combustion.

6. Monitoring and/or Recordkeeping Requirements

- a) In order to ensure emissions unit P900 and the associated DEC system with adjustable gap continues to operate as designed, the permittee shall operate this emissions unit in accordance with the manufacturer’s recommendations, instructions, and operating manual(s) with any modifications deemed necessary by the permittee. These manufacturer’s recommendations, instructions, and operating manual(s), with any modifications documents, shall be maintained for the life of this emissions unit.

The permittee shall perform the recommended maintenance at the recommended intervals. The permittee shall keep records of the maintenance performed on P900 and associated DEC system with adjustable air gap and shall retain them for a period of five years from the date the record was created.

7. Testing Requirements

- a) Emission Limitation:

VOC emissions shall not exceed 22.0 lbs/hr from emissions unit P900

Applicable Compliance Method:

Compliance with this emission limit shall be demonstrated through stack testing in accordance with the methods and procedures specified in B.4.g) above.

C. Emissions Unit Terms and Conditions

1. P900, Electric Arc Furnace (EAF)

Operations, Property and/or Equipment Description:

Electric Arc Furnace (EAF), 110 TPH capacity, for the melting of scrap steel with direct evacuation control (DEC) for capture and control of CO and VOC emissions, and a baghouse for control of particulate emissions. The P900 Melt Shop baghouse capture system includes a furnace roof control (Direct Evacuation Capture) system, a common roof canopy, and a scavenger canopy.

- 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.	ORC 3704.03(T) OAC rule 3745-31-05(A)(3) See g)(1) below.	PM (filterable) emissions shall not exceed 1.57 tons/month averaged over a 12-month rolling period (total for melt shop baghouse). PM₁₀ (filterable) emissions shall not exceed 1.19 tons/month averaged over a 12-month rolling period (total for melt shop baghouse). PM_{2.5} (filterable) emissions shall not exceed 1.16 tons/month averaged over a 12-month rolling period (total for melt shop baghouse). PM/PM₁₀/PM_{2.5} (condensable) emissions shall not exceed 1.02 tons/month averaged over a 12-month rolling period. Nitrogen oxide (NO_x) emissions shall not exceed 11.58 tons/month averaged over a 12-month rolling period. Volatile organic compound (VOC) emissions shall not exceed 7.02 tons/month averaged over a 12-month rolling period. The requirements of this rule also include compliance with the requirements OAC rules



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		3745-31-10 through 20 for SO ₂ and CO in b)(1)e. and f. and NSPS 40 CFR Part 60 Subpart AAa.
b.	OAC rule 3745-31-05(A)(3)(a)(ii)	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the mercury and lead emissions from this emissions unit since the potential to emit is less than 10 tons/year.
c.	OAC rules 3745-31-10 through 20 (PSD) These lb/hr BACT limits were originally established through the PSD PTI 13-04176 and remain in effect. The ton/year limits have been replaced with new BAT limits since BACT was not triggered for these pollutants for permit modification P0120585.	Emissions from the EAF shall not exceed the following: PM emissions shall not exceed 13.05 lbs/hr (filterable, stack and fugitive combined). PM₁₀ emissions shall not exceed 9.91 lbs/hr (filterable, stack and fugitive combined). Nitrogen oxide (NO_x) emissions shall not exceed 36.30 lbs/hr. Volatile organic compound (VOC) emissions shall not exceed 22.0 lbs/hr. Lead (Pb) emissions shall not exceed 0.04 lb/hr and 0.17 TPY (for all units controlled by the melt shop baghouse combined). See b)(2)b. below. Total hourly emissions of these pollutants from the Melt Shop baghouse shall not exceed the limits identified in section B.4 .
d.	OAC rules 3745-31-10 through 20 (PSD) OAC rules 3745-31-21 through 27 (Nonattainment NSR) SO₂ emissions exceeded the significant threshold for permit modification P0120585 and are subject to BACT and LAER.	The following limits apply to P043, P900, and P901 combined: Sulfur dioxide (SO₂) emissions shall not exceed 166.1 lbs/hr and 1.51 lbs/ton of steel produced. Total annual emissions of SO₂ from the Melt Shop baghouse shall not exceed the limit identified in section B.4..



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rules 3745-31-10 through 20 (PSD) CO emissions exceeded the significant threshold for permit modification P0120585 and are subject to BACT.	Carbon monoxide (CO) emissions shall not exceed 356.4 lbs/hr and 1364.20 tons per rolling 12-month period. See b)(2)d. below. Total hourly emissions of CO from the Melt Shop baghouse shall not exceed the limit identified in section B.4..
f.	OAC rule 3745-17-07(A)(1)	The stack opacity limitation specified by this rule is less stringent than the stack opacity limitation established pursuant to OAC rules 3745-31-10 through 20 per section B.4..
g.	OAC rule 3745-17-11(B)	The particulate emission limitation specified by this rule is less stringent than the particulate emission limitation established pursuant to OAC rules 3745-31-10 through 20 per b)(1)d.
h.	OAC rule 3745-18-06(E)(1)	The sulfur dioxide emission limitation specified by this rule is less stringent than the sulfur dioxide emission limitation established pursuant to OAC rules 3745-31-21 through 27 per b)(1)e..
i.	OAC rule 3745-21-11(B)	The VOC RACT determination in accordance with this rule is equivalent to the VOC RACT emission limit established pursuant to OAC rule 3745-31-05(D).
j.	OAC rule 3745-31-05(D) (federally enforceable requirements to comply with OAC rule 3745-21-11(B))	See Facility-Wide Terms and Conditions B.5 through B.7. above.
k.	NSPS 40 CFR Part 60, Subpart AAa	The particulate emission limitation specified by this rule is less stringent than the particulate emission limitation established pursuant to OAC rules 3745-31-10 through 20 per section B.4..



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		The opacity limitations specified by this rule are equivalent to the opacity limitations established pursuant to OAC rules 3745-31-10 through 20 per section B.4..
l.	40 CFR Part 63, Subpart YYYYY	The particulate emission limitation specified by this rule is less stringent than the particulate emission limitation established pursuant to OAC rules 3745-31-10 through 20 per section B.4.. The fugitive dust opacity limitation for the Melt Shop building specified by this rule is equivalent to the fugitive dust opacity limitation established pursuant to OAC rules 3745-31-10 through 20 per section B.4..
m.	40 CFR Part 63, Subpart A	Table 1 to Subpart YYYYY of 40 CFR Part 63 - Applicability of General Provisions to Subpart YYYYY.

(2) Additional Terms and Conditions

- a. Mercury emissions shall be controlled by using the baghouse and by restricting the amount of mercury containing scrap used in the process. For purposes of this permit to install, "mercury containing scrap" is defined as #2 bundles or shredded (frag) scrap consisting in part of either automobile or white goods scrap obtained from a source where the readily accessible mercury containing devices have not been removed prior to crushing or shredding.
- b. The permittee performed a Best Available Control Technology (BACT) review for NO_x, CO, PM/PM₁₀, lead, and VOC through PTI 13-04176 issued on 6/10/2004, with the exception of the PM_{2.5} limit which is included in PTI #P0120585 as a BAT limit. The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 in b)(1)d. above. The following determinations were made for this emissions unit:

PM - Use of a baghouse with an emission limit of 0.00069 gr/dscf of exhaust gases
PM₁₀ - Use of a baghouse with an emission limit of 0.00052 gr/dscf of exhaust gases
PM_{2.5} - Use of a baghouse with an emission limit of 0.00051 gr/dscf of exhaust gases
Lead -Use of a baghouse with an emission limit of 0.03 lb/hr



NO_x -Use of Direct Evacuation Control (DEC) system, low NO_x oxy-fuel burners and monitoring of specific process variables.

VOC -Use of Direct Evacuation Control (DEC) system

CO -Use of Direct Evacuation Control (DEC) system

The PM, PM₁₀, PM_{2.5}, and lead limits have been included and adjusted based on updated information from the permittee in their permit application. The adjusted limits in PTI #P0120585 supersede the limits established in PTI #13-04176.

- c. The permittee performed a Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) review for SO₂ for permit modification P0120585 issued on 10/2/2017. The emissions limits based on the BACT/LAER requirements are listed under OAC rules 3745-31-10 through 20 in b)(1)e. above. The following determinations have been made for this emissions unit:

SO₂ –use of good operating practices per c)(9) below and compliance with the BACT/LAER emission limits in section B.4.b).

See section B.4.b) for BACT/LAER emission limits for SO₂.

- d. The permittee performed a Best Available Control Technology (BACT) review for CO for permit modification P0120585 issued on 10/2/2017. The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 in b)(1)f. above. The following determination has been made for this emissions unit:

CO – Use of Direct Evacuation Control (DEC) system with adjustable air gap and water-cooled elbow and duct with emission limit of 3.24 lbs CO/ton of steel.

- e. The permittee shall employ the lowest achievable emission rate (LAER) measures for fugitive sulfur dioxide emissions escaping the melt shop building. Escaping visible fugitive dust emissions shall be used as the indicator for the existence of conditions that are also conducive to the escape of fugitive sulfur dioxide emissions, if present. The LAER measures shall be sufficient to minimize or eliminate visible emissions of fugitive dust from the door opening at the west end of the melt shop through which scrap cars enter and exit (“west end door” or “west end melt shop door”). The permittee shall operate the west end door when the EAF (P900) is in operation such that it remains closed to 6 feet above grade or less except when scrap cars are entering or exiting the melt shop. The presence of visible emissions of fugitive dust escaping the west end door is not a deviation of the LAER requirement provided the permittee complies with this additional term and condition and the operating restrictions, monitoring and recordkeeping, and reporting requirements set forth in, c)(8), d)(17) through d)(19), and e)(7) and e)(8) below.

c) Operational Restrictions

- (1) The minimum inlet plenum pressure across the Melt Shop baghouse, when this emissions unit is operating, shall be maintained at or above 4.0 inches of water, based on 15-minute averages. This baghouse inlet plenum pressure shall be monitored and recorded at least every 15 seconds.



- (2) The cleaning “set point”* for the baghouse shall be maintained at or below a maximum of 8.0 inches of water. Charter Steel may use a higher cleaning set point for the baghouse if subsequent particulate emission performance tests demonstrate compliance at the requested higher set point.

* The cleaning “set point” is an inlet plenum pressure reading across all of the baghouse compartments. The baghouse compartments are on a continuous automatic cleaning cycle rotation. Once the inlet plenum transmitter reading falls below the established cleaning “set point”, then the cleaning cycle stops. In essence, sufficient cleaning has occurred once that cleaning “set point” has been reached. The cleaning cycle continues as long as the reading exceeds 8.0 inches. Once it goes below 8.0 inches, the cleaning cycle can stop. Typically, at least one of the 12 compartments on the baghouse is in a cleaning mode at any given time, so the cleaning cycle essentially remains on continuously. There are 300 bags in each compartment.

- (3) The emissions from P900 shall be vented to the Melt Shop baghouse with the particulate and lead emissions being controlled by the melt shop baghouse.
- (4) The maximum annual production rate for this emissions unit shall not exceed 842,100 tons of steel, based upon a rolling, 12-month summation of the tons of steel produced per month.
- (5) The permittee shall operate this emissions unit in accordance with the Scrap Management Program (SMP) submitted to the Cleveland Division of Air Quality (Cleveland DAQ) to allow the minimal use of scrap charged in the EAF that contains mercury, lead, oils, plastics, and organic materials. The SMP shall be viewed as an operational restriction for the EAF. The SMP shall be updated as needed in conjunction with the Title V permit renewal process. Any future change to the SMP that would increase the amount of these compounds present in the scrap, or result in the emissions of an air contaminant not previously emitted, must be approved by the Cleveland DAQ.

The SMP shall include the following requirements that are potentially related to reducing VOC emissions during melting:

- a. Scrap materials must be depleted to the extent practicable of undrained used oil filters, chlorinated plastics, and free organic liquids at the time of charging to the furnace.
- b. Lead-containing components of scrap, such as batteries, battery cables, and wheel weights must be removed, to the extent practicable, prior to charging to the EAF.
- c. No non-ferrous or non-conforming material (wood, plastics, concrete, bricks, copper, stainless steel, brass, bronze, or electric motors) per load.
- d. No pressure vessels, cylinders, boxes crimped tubular or closed containers of any kind.
- e. Turnings and borings within the scrap are to be free of scale, grinding dust, and excessive oxidation.
- f. The maximum scrap bundle size that will be accepted is 2 feet by 2 feet by 4 feet.

The permittee shall inspect scrap material to ensure that the scrap material meets the above requirements and reject non-conforming scrap loads as needed in accordance with the SMP.



All grades of scrap shall be free of excessive dirt, oil, and grease. Heavily oiled scrap shall not be used. As part of the SMP, the permittee shall operate a radionuclide detector which will be used to inspect all incoming scrap material into the facility. Radioactive scrap material shall not be used at this facility. Any scrap material which is determined to be radioactive shall be disposed of in accordance with the Nuclear Regulatory Commission's (NRC) requirements.

- (6) The following standards are requirements of the NSPS Subpart AAa and BACT. The application and enforcement of the NSPS standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable. Visible emissions shall not exceed the following limits as a six-minute average:

- a. 3 percent opacity from the baghouse exit; and,
- b. 6 percent opacity from the melt shop

[Note: The melt shop opacity limit in b. above is more restrictive than the NSPS limit which only limits emissions due solely to the operation of an EAF(s) or AOD vessel(s). This limit in b. above is for visible emissions of fugitive dust from the entire melt shop building.]

- (7) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart YYYYY, including the following sections:

63.10685 (a)(1)	Pollution prevention plan for metallic scrap
63.10685 (a)(2)	Restricted metallic scrap
63.10685 (b)	Mercury requirements

- (8) When the EAF (P900) is in operation, the permittee shall restrict the periods of time during which the door at the west end of the melt shop is open more than 6 feet above grade to the shortest period of time practicable (both in duration and frequency) to allow scrap cars to enter or exit the melt shop, including the following:

- a. If the west end melt shop door remains open more than 6 feet above grade for more than five minutes while the EAF is in operation, then an automated alarm notification shall be sent to the melt shop operators. The permittee shall take prompt action to have the west end door closed to 6 feet above grade or less.
- b. In the event the west end melt shop door becomes inoperable or is obstructed such that it is stuck open more than 6 feet above grade and cannot be closed, the permittee shall comply with the malfunction provisions of OAC rule 3745-15-06, as well as the following:
 - i. If the west end door remains open more than 6 feet above grade for one hour or more, during normal business hours, the permittee shall notify within one hour the Ohio EPA, DAPC, Central Office SIP Manager via email and the Cleveland Division of Air Quality Enforcement Chief via the malfunction hotline. During periods other than normal business hours, the foregoing notifications may be made the next business day.
 - ii. The permittee shall perform visible emission checks once per heat (during melting or refining) for a minimum of five minutes in duration. If visible fugitive



dust emissions are escaping through the west end door, and the door is unable to be closed to 6 feet above grade or less, the permittee shall implement corrective action(s) to eliminate or minimize the fugitive dust emissions in accordance with the permittee's malfunction abatement plan. The plan shall include provisions for the cessation of sulfur addition at the EAF as soon as practicable consistent with the orderly transition away from the production of high-sulfur grades of steel, unless the Director of Ohio EPA has approved the addition of sulfur while the west end door is inoperable.

(9) Melt Shop Sulfur-based Good Operating Practices:

The permittee shall follow the melt shop's standard operating procedures as it relates to achieving each heat's final elemental chemistry specification for sulfur content. This includes any procedures for adjusting the sulfur content in the EAF, LMF and/or VTD.

d) Monitoring and/or Recordkeeping Requirements

(1) The following are requirements of the NSPS Subpart AAa. Observations of the opacity of the visible emissions from the Melt Shop baghouse shall be performed by a certified visible emission observer as follows:

- a. Visible emission observations shall be conducted at least once per day of operation. The observations shall occur when the furnace is operating in the charging, melting, tapping or refining period. These observations shall be taken in accordance with Method 9 of 40 CFR Part 60, Appendix A and, for at least three 6-minute periods, the opacity shall be recorded for point(s) where the greatest opacity visible emissions are observed, and that portion of the plume where the condensed water phase is not present in accordance with the procedures listed in Method 9 of 40 CFR Part 60, Appendix A. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of all shop opacity observations for visible particulate emissions.

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

(2) In accordance with NSPS Subpart AAa, the permittee shall comply with either a. or b. below:

- a. Visible emission observations shall be conducted by a certified visible emission observer at least once per day when the furnace is operating in the meltdown or refining period. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions



observed during a single incident. The owner or operator shall maintain records of all shop observations made in accordance with the above requirements. The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity readings and to verify that the Method 9 certifications are up to date for the responsible individuals; or

- b. The permittee shall calibrate and maintain a monitoring device that allows the pressure in the free space inside the EAF to be monitored. The monitoring device may be installed in any appropriate location in the EAF or DEC duct prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring device shall have an accuracy of plus or minus 5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions. The maximum pressure determined during the most recent compliance demonstration shall not be exceeded by the 15-minute integrated average furnace pressure when the EAF is operating in a "meltdown and refining period," as defined in 40 CFR 60.271a. Operation at higher pressures may be considered by the Ohio EPA, Division of Air Pollution Control (DAPC) to be unacceptable operation and maintenance of the control system. The permittee may petition the Ohio EPA for reestablishment of the maximum pressure limit whenever the permittee can demonstrate to the Agency's satisfaction that EAF operating conditions upon which the pressures were previously established are no longer applicable.

The permittee shall check and record on a once-per-shift basis the furnace static pressure and either (1) check and record the control system fan motor amperes and damper positions on a once-per-shift basis; (2) install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood; or (3) 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 may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow rate monitoring devices shall have an accuracy of plus or minus 10 percent over their normal operating range and shall be calibrated according to the manufacturer's instructions. The Ohio EPA, DAPC may require the permittee to demonstrate the accuracy of the monitoring devices relative to Methods 1 and 2 of Appendix A of 40 CFR Part 60. The values or range of values of these parameters as determined during the most recent demonstration of compliance shall be maintained at the appropriate levels for each applicable period. For fan motor amperes, the range may be set at plus or minus 15%. A range may also be set for damper positions. Operation at other than baseline values or ranges of values will be considered by the Ohio EPA, DAPC to be unacceptable operation and maintenance of the control system. The permittee may petition the Ohio EPA for reestablishment of the values or ranges of values for these parameters whenever the permittee can demonstrate to the Agency's satisfaction that the operating conditions upon which the values or ranges of values were previously established are no longer applicable.



Per 40 CFR Part 60.274a(c), the applicable periods for fan motor amperes, all damper positions, and volumetric flow rates are all periods in which a hood is operated for the purpose of capturing emissions.

Per 40 CFR Part 60.274a(g), the applicable periods for the pressure in the free space inside the furnace are the meltdown and refining period(s).

- (3) The permittee shall monitor the operation of the furnace control systems and maintain records in accordance with the following requirements:
 - a. The permittee shall perform and maintain records of the monthly operational status inspections of the equipment that is important to the performance of the total capture systems (i.e., pressure sensors, dampers, and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion.) Any deficiencies shall be recorded and proper maintenance performed. The permittee may petition the Ohio EPA, DAPC to approve any alternative to monthly operational status inspections that will provide a continuous record of the operation of each emission capture system; and,
 - b. Upon approval by the U.S. EPA, an alternative method may be established to replace the monitoring and recordkeeping requirements found in (2)b., and (3)a. above.
- (4) The permittee shall maintain monthly production records for this emissions unit. These records, at a minimum, shall contain the following information:
 - a. the number of hours this emissions unit was in operation; and
 - b. the tons of steel produced.
- (5) The permittee shall maintain monthly records of the tons of steel produced during each calendar month and the rolling, 12-month summation of the steel produced.
- (6) The permittee shall maintain monthly production records for the melt shop for each different category (i.e., low-sulfur grades, mid-sulfur grades, and high-sulfur grades) of steel produced. These records, at a minimum, shall contain the following information:
 - a. the tons of steel produced during the low-sulfur grade production;
 - b. the tons of steel produced during the mid-sulfur grade production; and
 - c. the tons of steel produced during the high-sulfur grade production.
- (7) The permittee shall maintain monthly records for the melt shop of the tons of steel produced for each different category (i.e., low-sulfur grades, mid-sulfur grades, and high-sulfur grades) for each calendar month, and the rolling, 12-month summation of the steel produced for each different category.
- (8) The permittee shall properly operate and maintain a continuous parameter monitoring system (CPMS) to measure the inlet plenum pressure across the Melt Shop baghouse while the emissions unit is in operation. The permittee shall record the inlet plenum pressure across the



melt shop baghouse at least every 15-seconds and monitor the 15-minute average inlet plenum pressure using the CPMS.

- (9) If the minimum average inlet plenum pressure is less than 4.0 inches of water, an automated notification (email or text message) shall be sent to the Melt Shop operator and environmental engineer.
- (10) If the cleaning set point for the baghouse deviates from 8.0 inches of water, or a cleaning set point established by subsequent performance testing, an automated notification (email or text message) shall be sent to the Melt Shop operator and environmental engineer.
- (11) The CPMS shall be calibrated, operated, and maintained as follows:
 - a. Locate the pressure sensor in or as close as possible to a position that provides a representative measurement of the inlet plenum pressure and that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion;
 - b. Verify that the cleaning cycle is operating as designed daily (baghouse compartments are in cleaning mode if the inlet plenum pressure is above the cleaning setpoint);
 - c. Use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range;
 - d. Using a manometer, check, and record gauge calibration quarterly and transducer calibration monthly; and
 - e. Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or immediately install a new pressure sensor.
- (12) The permittee shall operate each CPMS as follows:
 - a. Each CPMS must complete a minimum of one cycle of operation for each successive 1-minute period;
 - b. The permittee must have a minimum of three of the required four data points to constitute a valid minute of detail;
 - c. Each CPMS must have valid data for 100 percent of every averaging period; and
 - d. Each CPMS must determine and record the 15-minute average of all recorded readings.
- (13) The permittee shall obtain an analysis of the Melt Shop Baghouse dust on a monthly basis. At a minimum, the samples shall be analyzed for chromium, magnesium, manganese, lead, zinc, and mercury content. The results shall be reported in weight percent. This analysis shall be conducted in accordance with U.S. EPA test methods and procedures.
- (14) The permittee shall identify the types of scrap received as mercury containing scrap or other scrap (including scrap from which mercury containing devices have been removed). The permittee shall record the weight of mercury containing scrap, in pounds, the weight of other scrap, in pounds, and the charge identification number, for each furnace charge. The permittee shall determine and record the percent by weight of mercury containing scrap charged to the EAF, on a daily basis.



- (15) The permittee shall comply with the applicable record keeping requirements under 40 CFR Part 63, Subpart YYYYY, including the following sections:

63. 10685 (c)	Pollution prevention plan for metallic scrap Restricted metallic scrap Mercury requirements
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- (16) The permittee shall operate and maintain sensors at the west end melt shop door that alert the melt shop operators as to when the door is open more than 6 feet above grade for more than five minutes.
- (17) The permittee shall operate and maintain a system that electronically records the period of time (date, start time and end time) whenever the west end melt shop door remains open more than 6 feet above grade while the EAF is in operation.
- (18) The permittee shall maintain daily records of the following information when the door at the west end of the melt shop remains open more than 6 feet above grade for more than five minutes while the EAF is operating:
- If visible emissions of fugitive dust are escaping through the west end door, the date and time of the visual emissions checks required in accordance with c)(8)b.ii., the corrective action(s) taken to eliminate or minimize the fugitive dust emissions, and the dates such action(s) were implemented; and
 - If the permittee did not implement any necessary corrective action(s) to eliminate or minimize the fugitive dust emissions, the permittee shall note the reason why such corrective actions were not implemented.
- (19) The permittee shall maintain records demonstrating conformance with the standard operating procedures as it relates to achieving the final elemental chemistry specification for sulfur content (e.g., "consumption heat report" and "QC report") for a minimum of 3 years and shall make them available for inspection, if requested.

e) Reporting Requirements

- The permittee shall submit quarterly written deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) of all exceedances of the opacity restrictions for the Melt Shop baghouse from b)(2)a.. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity exceeds these limits.
- The permittee shall submit quarterly written deviation (excursion) reports to the Cleveland DAQ that identify all exceedances of the static pressure values in the EAF established in d)(2)b. above and either operation of control system fan motor amperes at values exceeding plus or minus 15 percent of the values established under d)(2)b. above or operation at flow rates lower than those established under d)(2)b. above.
- The permittee shall submit quarterly written deviation (excursion) reports to the Cleveland DAQ that identify all periods of time during which the inlet plenum pressure for the Melt Shop Baghouse did not comply with the minimum inlet plenum pressure reading specified in c)(1).

- (4) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which identify all exceedances of the rolling, 12-month steel production rate limitation. Each report shall be submitted to the Cleveland DAQ within 30 days after the deviation occurs.
- (5) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its 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 reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.
- (6) The permittee shall comply with the applicable reporting requirements under 40 CFR Part 63, Subpart YYYYY, including the following sections:

63. 10685 (c)	Pollution prevention plan for metallic scrap Restricted metallic scrap Mercury requirements
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- (7) The permittee shall submit quarterly deviation reports that identify all periods of time when a visible emissions inspection was required for the west end melt shop door but not conducted, and when a corrective action was determined to be necessary but was not implemented in accordance with d)(19).
 - (8) The permittee shall submit quarterly reports that identify:
 - a. all periods of time when the west end melt shop door was open more than 6 feet above grade for more than five minutes while the EAF was operating due to an inoperable door or obstruction that prevented the door from being closed;
 - b. all periods of time when the west end melt shop door remained open more than 6 feet above grade for more than five minutes for any other reason while the EAF was operating, but was not closed to 6 feet above grade or less within 10 minutes after it was opened; and
 - c. all periods of time when visible emissions of fugitive dust were observed escaping through the west end door during the checks required in accordance with c)(8)b.ii..
 - (9) 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.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitations:

PM (filterable) emissions shall not exceed 1.57 tons/month averaged over a 12-month rolling period (total for melt shop baghouse).

PM₁₀ (filterable) emissions shall not exceed 1.19 tons/month averaged over a 12-month rolling period (total for melt shop baghouse).



PM_{2.5} (filterable) emissions shall not exceed 1.16 tons/month averaged over a 12-month rolling period (total for melt shop baghouse).

Applicable Compliance Method:

Compliance with the ton/month average emission limitations shall be determined by multiplying the gr/dscf for each pollutant (0.00069 gr PM/dscf, 0.00052 gr PM₁₀/dscf, and 0.00051 gr PM_{2.5}/dscf) by the maximum airflow rate of the baghouse (728,459 dscfm), multiply by 60 minutes/hour, divide by 7000 gr/lb, multiply by 8760 hrs/yr, and divided by 2000 lbs/ton. Then divide by 12 months to determine the monthly average emission rate. Therefore, provided compliance is maintained with the gr/dscf limitations, then compliance shall also be determined for the ton/month average emission limitation.

b. Emission Limitation:

PM/PM₁₀/PM_{2.5} (condensable) emissions shall not exceed 1.02 tons/month averaged over a 12-month rolling period, for P900.

Applicable Compliance Method:

Compliance with this ton/month average emission limitation shall be determined through the use of the controlled emission factor for the EAF steel processing (0.029 lb PM/PM₁₀/PM_{2.5}/ton steel) from AP-42 Table 12.5.1-2 which is multiplied by the actual annual steel process rate of the emissions unit (in tons/rolling 12 months) and dividing by the factor of (2,000 lbs/ton). Then divide by 12 months to determine the monthly average emission rate.

c. Emission Limitation:

Nitrogen oxide (NO_x) emissions shall not exceed 11.58 tons/month averaged over a 12-month rolling period, for P900.

Applicable Compliance Method:

Compliance with this ton/month average emission limitation shall be determined through the use of the emission factor for the EAF steel processing (0.33 lb NO_x/ton steel) which is multiplied by the actual annual steel process rate of the emissions unit (in tons/rolling 12 months) and dividing by the factor of (2,000 lbs/ton). Then divide by 12 months to determine the monthly average emission rate.

d. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 7.02 tons/month averaged over a 12-month rolling period, for P900.

Applicable Compliance Method:

Compliance with this ton/month average emission limitation shall be determined through the use of the emission factor for EAF steel processing (0.2 lb VOC/ton steel) which is multiplied by the actual annual steel process rate of the emissions unit (in tons/rolling 12-months) and dividing by the factor of (2,000 lbs/ton). Then divide by 12 months to determine the monthly average emission rate.



e. Emission Limitation:

PM emissions shall not exceed 13.05 lbs/hr (filterable, stack and fugitive combined), for P900.

PM₁₀ emissions shall not exceed 9.91 lbs/hr (filterable, stack and fugitive combined), for P900.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section B.4. The emission testing shall be performed in accordance with the requirements of 40 CFR Part 60 Subpart AAa and 40 CFR Part 63 Subpart YYYYY.

f. Emission Limitation:

NO_x emissions shall not exceed 36.30 lbs/hr, for P900.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the EAF steel processing (0.33 lb NO_x/ton steel) which is multiplied by the maximum hourly steel process rate of the emissions unit (110 tons per hour).

g. Emission Limitation:

VOC emissions shall not exceed 22.0 lbs/hr, for P900.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for EAF steel processing (0.2 lb VOC/ton steel) which is multiplied by the maximum hourly steel process rate of the emissions unit (110 tons per hour).

Compliance with this emission limit shall be demonstrated through stack testing in accordance with the methods and procedures specified in section B.4.g) above.

h. Emission Limitation:

Lead (Pb) emissions shall not exceed 0.04 lb/hr for all emissions units controlled by the melt shop baghouse combined.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section B.4.. The emission testing shall be performed in accordance with the requirements of 40 CFR Part 60 Subpart AAa and 40 CFR Part 63 Subpart YYYYY.

i. Emission Limitation:

Lead (Pb) emissions shall not exceed 0.17 ton/year for all emissions units controlled by the melt shop baghouse combined.

Applicable Compliance Method:

The permittee performed a mass balance analysis of the Melt Shop baghouse to determine the amount of lead emissions. The permittee has identified a maximum



emission rate of 0.03 lb lead/hr that includes a 20% safety factor from the meltshop baghouse. Dividing this emission rate by 110 tons steel/hr results in a controlled emission factor of 0.0003 lb lead/ton steel. Compliance with this ton/year emission limitation shall be determined through the use of the emission factor for the EAF steel processing (0.0003 lb lead/ton steel) which is multiplied by the actual annual amount of steel produced (tons per rolling 12 months) and dividing by the factor of (2,000 lbs/ton). The fugitive portion of the lead emissions is calculated as 0.5 lb lead/ton steel processed multiplied by the actual annual steel process rate of the emissions unit (tons per rolling 12 months), multiplied by the fugitive portion factor (0.05%), and dividing by the factor of 2,000 lbs/ton). Add the stack and fugitive emission rate.

j. Emission Limitation:

SO₂ emissions shall not exceed 166.1 lbs/hr and 1.51 lbs/ton of steel produced, for P043, P900, and P901 combined.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for high-sulfur grade steel processing (1.51 lb SO₂/ton steel, worst case scenario) which is multiplied by the maximum hourly steel process rate of the melt shop (110 tons per hour).

After the stack testing is completed per Section B.4.g), the permittee shall use the SO₂ emission factor (lb SO₂/ton steel) that is determined from the most recent stack test that demonstrated compliance. This includes future stack testing that will be required by the permittee's Title V permit. The emission factor determined from the most recent stack test may be multiplied by the actual hourly steel process rate of the melt shop (in tons per hour) to demonstrate compliance with the allowable hourly SO₂ emission limit.

k. Emission Limitation:

CO emissions shall not exceed 356.4 lbs/hr, for P900.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the EAF steel processing (18.0 lbs CO/ton steel) which is multiplied by the maximum hourly steel process rate of the emissions unit (110 tons per hour) and (1 - 0.82) which is the control efficiency for the DEC control system.

18 lbs CO/ton steel x (1 - 0.82) = 3.24 lbs CO/ton steel (BACT limit)

l. Emission Limitation:

CO emissions shall not exceed 1,364.20 tons per rolling 12-month period, for P900.

Applicable Compliance Method:

Compliance with this annual emission limitation shall be determined through the use of the emission factor for the EAF steel processing (18.0 lbs CO/ton steel) which is multiplied by the actual annual steel process rate of the emissions unit (in tons/rolling



12 months), $(1 - 0.82)$ which is the control efficiency for the DEC control system and dividing by the factor of (2,000 lbs/ton).

m. Emission Limitation:

CO emissions shall not exceed 3.24 lbs CO/ton of steel, for P900.

Applicable Compliance Method:

If required, compliance shall be determined through stack testing using USEPA test methods 1 – 4 and 10 of 40 CFR Part 60, Appendix A.

(2) Emissions testing shall be conducted in accordance with section B.4.

g) Miscellaneous Requirements

(1) The following PTIs were previously issued for emissions unit P900:

PTI #13-04176 issued on 6/10/2004;

PTI admin mod #13-04176 issued on 2/12/2008;

PTI admin mod #P0107543 issued on 3/10/2011;

PTI admin mod #P0111766 issued on 12/28/2012; and

PTI Chapter 31 mod #P0120585 issued on 10/2/2017 supersedes the above PTIs for this emissions unit.