PUBLIC NOTICE

Gerdau Ameristeel US Inc. has applied to the Tennessee Department of Environment and Conservation, Division of Air Pollution Control for a significant modification to their existing major source (Title V) operating permit subject to the provisions of Tennessee Air Pollution Control Regulations 1200-03-09-.02(11) (Title V Regulations). A major source operating permit is required by both the Federal Clean Air Act and Tennessee's air pollution control regulations. However, it should be noted that this facility has a current major source operating permit.

The Title V operating permit subject to the modification is identified as follows: Division identification number 57-0189/574449. The specific permit conditions affected by this modification are identified as follows: E1 (fee payment); E2 (reporting requirements); added Condition E3-9 listing Insignificant Activities, added E12-1 through E12-8 (source specific conditions for 57-0189-11), and added additional agreement letters as part of Attachment 6. Only the portions of the Title V permit affected by this significant modification are open for comment during the notice period.

EPA has agreed to treat this draft significant modification to permit no. 574449 as a proposed Part 70 significant permit modification and to perform its 45-day review provided by the law concurrently with the public notice period. If any substantive comments are received, EPA's 45-day review period will cease to be performed concurrently with the public notice period. In this case, EPA's 45-day review period will start once the public notice period has been completed and EPA receives notification from the Tennessee Air Pollution Control Division that comments have been received and resolved. The status regarding EPA's 45-day review of these permits and the deadline for submitting a citizen's petition can be found at the following website address:

https://www.epa.gov/caa-permitting/tennessee-proposed-title-v-permits"

Copies of the application materials and draft permits are available for public inspection during normal business hours at the following locations:

Nashville Environmental Field Office
Division of Air Pollution Control
711 R.S. Gass Blvd
Nashville, TN 37216

and

Tennessee Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243

Electronic copies of the draft permit and application materials are available by accessing the TDEC internet site located at:

http://www.tn.gov/environment/ppo-public-participation/ppo-public-participation/ppo-air.html

Questions concerning the source(s) may be addressed to Shawn Auth at (615) 532-6812 or by e-mail at Shawn.Auth@tn.gov.

Interested parties are invited to review these materials and comment. In addition, a public hearing may be requested at which written or oral presentations may be made. To be considered, written comments or requests for a public hearing must be received no later than 4:30 PM on **June 16, 2022**. To assure that written comments are received and addressed in a timely manner, written comments must be submitted using one of the following methods:

1. **Mail, private carrier, or hand delivery:** Address written comments to Ms. Michelle W. Owenby, Director, Division of Air Pollution Control, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue 15th Floor, Nashville, Tennessee 37243.

2. **E-mail**: Submit electronic comments to air.pollution.control@tn.gov.

A final determination will be made after weighing all relevant comments.

Individuals with disabilities who wish to review information maintained at the above-mentioned depositories should contact the Tennessee Department of Environment and Conservation to discuss any auxiliary aids or services needed to facilitate such review. Such contact may be in person, by writing, telephone, or other means, and should be made no less than ten days prior to the end of the public comment period to allow time to provide such aid or services. Contact the Tennessee Department of Environment and Conservation ADA Coordinator, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue 22nd Floor, Nashville, TN 37243, 1-(866)-253-5827. Hearing impaired callers may use the Tennessee Relay Service, 1-(800)-848-0298.

STATEMENT OF BASIS
Proposed Addendum to TITLE V PERMIT – Significant Modification #2

Facility Name: Gerdau AmeriSteel US Inc.
City: Jackson
County: Madison

Date Application Received: June 15, 2018
Date Application Deemed Complete: June 15, 2018

Emission Source Reference Number: 57-0189
Permit Number: 574449

INTRODUCTION

This narrative is being provided to assist the reader in understanding the content of the attached Title V operating permit. This Title V Permit Statement is written pursuant to Tennessee Air Pollution Control Rule 1200-03-09-.02(11)(f)1.(v). The primary purpose of the Title V operating permit is to consolidate and identify existing state and federal air requirements applicable to Gerdau AmeriSteel and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the Title V Operating Permit. It initially describes the facility receiving the permit, then the applicable requirements and their significance, and finally the compliance status with those applicable requirements. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public participation process will be described in an addendum to this narrative.

Acronyms

PSD - Prevention of Significant Deterioration
NESHAP - National Emission Standards for Hazardous Air Pollutants
NSPS - New Source Performance Standards
MACT - Maximum Achievable Control Technology
NSR - New Source Review

I. Identification Information

A. Source Description

The facility is a steel scrap recycling mill. The process operation consists of 1) steel scrap shredder followed by ferrous and non-ferrous separation with four sorting hubs; 2) electric arc furnace; 3) preheaters, 4) reheat furnace and 5) product straightener process line. The following table includes a description of each emission source.

Emission Source Reference Number	Source Description
57-0189-01	One (1) electrically powered scrap steel shredder with ferrous and non-ferrous separation (including four (4) non-ferrous separation hubs). Ferrous and non-ferrous metals as well as Auto Shredder Residue (ASR) are separated by various methods including magnetic separation. Emissions from the separation of ASR are controlled with a cyclone (SHRED1). Non-ferrous Separation System - Non-ferrous material handling and separation processes that receive shredded material from the outlet of the existing scrap shredder, direct non-ferrous materials to the new sorting hubs. The shredded metal infeed to the hubs will come from the existing steel scrap shredder or other steel scrap providers and an on-site landfill. The sorted product will initially be stored in piles of uniformly sized materials and then will either be used in the existing steel melting process or be shipped offsite to customers. Source includes four (4) stand-alone sorting hubs (Steps 10, 11, 12, 15) with conveyor belts, separators, and destoners to separate miscellaneous metals including ferrous materials, ICW (insulated copper wire), copper, Zurik (primarily stainless steel), Zorba (primarily Al) and non-ferrous microfines. A shared cyclone and baghouse system (BH1) controls particulate matter emissions from the destoners on Steps 11 and 15 (Sorting Hubs 11 and 15).
57-0189-02	One Electric Arc Steel Melting Furnace (EAF) with Continuous Caster, EAF dust silo and lime storage with baghouse controls. The EAF has six (6) oxy-fuel burners with a total maximum rated heat capacity of 54,000,000 Btu per hour. The EAF uses a mixture of natural gas and oxygen as a supplemental fuel to the electric supply. The EAF particulate matter emissions are controlled by a direct evacuation control system and a canopy hood evacuation system. EAF dust is collected in a baghouse and stored in a silo, which has an additional baghouse. Lime storage silos are controlled by a baghouse**.**
57-0189-03	Nine preheaters with a total maximum heat input capacity of 48,000,000 BTU per hour, using natural gas as fuel. Fuel burning sources include three (3) ladle preheaters with low NOx burners, 10 MMBtu/hour each; two (2) tundish preheaters, 4.4 MMBtu/hour each; one ladle dryout heater, 6.2 MMBtu/hour; and one ladle cover dryout heater, one tundish dryout preheater, and one tapping spout dryout preheater, 1 MMBtu/hour each.
57-0189-04	One reheat furnace, used to heat billets to rolling temperature, has a maximum rated heat input capacity of 144,000,000 Btu per hour. Natural gas is the primary fuel and No.2 fuel oil is used as backup fuel.
57-0189-05	One product straightener process including sixteen (16) mill stands and a baghouse (BSBH1) for control of PM emissions. This product straightener is electrically powered.
57-0189-10	Auto Shredder Residue (ASR) Dryer with Baghouse - This scrap steel processing operation includes a 34 MMBtu/hour Heat Input and ASR Material Handling equipment (Conveyors and storage locations)
57-0189-11	Post Processing Heating Operation for Steel bars - This post processing operation has a heat input of 21.6 MMBtu/hour (Natural Gas fired)

List of insignificant activities

Insignificant Activity	**TAPCR 1200-03-09**
Roll Spray Welding	-.04(5)(a)4.(i)
All Storage Tanks with a capacity of ≤10,000 gallons	-.04(5)(f)17
Diesel Fuel Storage Tanks, capacity ≤40,000 gallons	-.04(5)(f)17
Gas Torches	-.04(5)(g)17
Gas Cutting Torches	-.04(5)(g)17
Hot Water Gas Heater	-.04(5)(a)4.(i)
Unpaved Roads	-.04(5)(f)(1)
Paved Roads	-.04(5)(f)(2)
Gas Space Heaters	-.04(5)(f)(14)
Gas Rooftop Heating Units	-.04(5)(f)(14)
Parts Washers (5)	-.04(5)(f)(22)
Emergency Generators (4)	-.04(5)(f)(37)

B. Facility Classification

1. Attainment or Non-Attainment Area Location
   Area *is* designated as an attainment area for all criteria pollutants.

2. Company *is* located in a *Class II area.*

C. Regulatory Status

1. PSD/NSR
   This facility *is* a major source under PSD.

2. Title V Major Source Status by Pollutant

Pollutant	Is the pollutant emitted?	If emitted, what is the facility's status?	
		Major Source Status	Non-Major Source Status
PM	Yes	Yes	No
PM_{10}	Yes	Yes	No
SO_2	Yes	Yes	No
VOC	Yes	Yes	No
NO_X	Yes	Yes	No
CO	Yes	Yes	No
Individual HAP	Yes	No	Yes
Total HAPs	Yes	No	Yes

3. MACT Standards

   This facility is an *area source* of HAP emissions.

   This facility is subject to the following MACT standards:
   - 40 CFR 63, Subpart YYYYY - *National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities*

- 40 CFR 63, Subpart ZZZZ – *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

4. Program Applicability

   Are the following programs applicable to the facility?

   PSD - Yes, the facility is a major source under PSD regulations
   NESHAP - Yes, 40 CFR 63, Subpart YYYYY and 40 CFR 63, Subpart ZZZZ
   NSPS - Yes, this facility is subject to the following NSPS standards:
   - 40 CFR 60, Subpart AA – *Standards of performance for Steel Plants: Electric Arc Furnaces Constructed after October 21, 1974, and On or Before August 17, 1983*
   - 40 CFR 60, Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*

5. New requirements and permit conditions:
   There are no new applicable requirements under this permit renewal.

II. Compliance Information

A. Compliance Status

Is the facility currently in compliance with all applicable requirements? ***(yes)***
If no, explain.

Are there any applicable requirements that will become effective during the permit term? ***(no)***

III. Other Requirements

A. Emissions Trading
The facility is not involved in an emission trading program.

B. Acid Rain Requirements
This facility is not subject to any requirements in Title IV of the Clean Air Act.

C. Prevention of Accidental Releases
Not Applicable

D. Greenhouse Gas Emissions
This facility has GHG potential emissions of 220,297 tons/year of CO_2e based on the June 15, 2018 Title V revision and is a major source for greenhouse gas emissions since emissions are above 75,000 tons/year of CO_2e threshold.

IV. Permit History

Initial Title V Permit Number 548094, issued September 20, 2001
Title V Renewal Permit Number 558867, issued September 7, 2007
Title V Renewal Permit Number 565713, issued December 18, 2013
Title V Renewal Permit Number 574449

V. Current Project Description

Title V Operating Permit Number 574449 represents the third renewal of the original Title V Operating Permit.

In addition to reorganizing the permit content to incorporate a sections E3 (incorporating the requirements of 40 CFR 60, Subpart AA) and E4 (incorporating the applicable requirements of 40 CFR 63, Subpart YYYYY), the following changes were made during this permit renewal:

Condition E5-2: The requirement to submit quarterly reports of daily visible emission evaluations performed on the EAF baghouses and shop during periods of meltdown or refining was revise to require submittal of reports on a semiannual basis. This is consistent with the current requirements of 40 CFR §60.276(d) and 40 CFR §60.7(c).

Conditions E8-3 and E8-5 through E8-7: It has been determined that the preheaters that comprise this emission source are non-process emission sources subject to 1200-03-06 of the TAPCR instead of being process emission sources subject to 1200-03-07. The regulatory citations for these conditions have been revised to reflect 1200-03-06 applicability. The PM emission limit agreed to by the facility is significantly lower than the allowable limit specified in 1200-03-06-.02(2), and remains unchanged.

VI. Public Participation Procedures

Notification of this draft renewal permit was provided (via email) to the following agencies located within 50 miles of the facility:

1. EPA Region IV, Air Permitting Section
2. Arkansas Department of Environmental Quality, Air Division
3. Mississippi Department of Environmental Quality, Office of Pollution Control

Summary of Comments and Responses:
No comments were received during the comment period (see email from EPA, received November 12, 2019).

VII. Permitting Activities for Permit Since Original Permit Issuance

Significant Modification #1 to permit 574449 (Issued on October 3, 2023):

Adding Source 10, ASR Dryer with baghouse control:

Updated the language of several A-D conditions

Updated Condition E1; update Fee Emissions Summary table and current Annual Accounting Period dates

Updated Condition E2: Added Condition E11-4 to E2(a)(1)

Added Source 10 specific conditions E11-1, E11-2, E11-3, E11-4, E11-5, E11-6, E11-7, E11-8, and E11-9

Significant Modification #2 to permit 574449 (Issued on DRAFT):

Added Source 11, Post processing heating operation for round bars

Added additional Agreement Letters as part of Attachment 6; letters dated August 3, 2021, and October 15, 2021

Updated Condition E1; update Fee Emissions Summary table

Updated Condition E2; Added Condition E12-3 to E2(a)(1)

Added Condition E3-9; condition to include list of insignificant activities

Added Source 11 specific conditions E12-1, E12-2, E12-3, E12-4, E12-5, E12-6, E12-7, and E12-8

Added Section VII Summary of Allowable Emissions by Source Number to the Statement of Basis

VII. Summary of Allowable Emissions by Source Number

Source ID	PM (tpy)	SO_2 (tpy)	CO (tpy)	VOC (tpy)	NO_X (tpy)	Pb (tpy)
01: Scrap Steel Raw Material Processing	40.28					
02: Electric Arc Steel Melting Furnace	185.63	177.39	4139.10	194.91	319.30	4.91
03: Nine preheaters	8.40	0.44	17.30	1.20	20.60	
04: Reheat furnace	2.06	35.50	51.90	3.40	247.30	
05: Product straightener	9.42					
10: ASR Dryer	12.80	0.09	8.32	0.82	7.90	
11: Post Processing Heating Operation for round bars	0.38	0.05	4.18	0.28	4.98	
Total	**258.97**	**213.47**	**4220.80**	**200.61**	**600.08**	**4.91**

STATE OF TENNESSEE
TENNESSEE AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243

SIGNIFICANT MODIFICATION #2 to OPERATING PERMIT (TITLE V) Issued Pursuant to Tennessee Air Quality Act

This permit fulfills the requirements of Title V of the Federal Clean Air Act (42 U.S.C. 7661a-7661e) and the federal regulations promulgated thereunder at 40 CFR Part 70 (FR Vol. 57, No. 140, Tuesday, July 21, 1992 p.32295-32312). This permit is issued in accordance with the provisions of paragraph 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations (TAPCR). The permittee has been granted permission to operate an air contaminant source in accordance with emissions limitations and monitoring requirements set forth herein.

Date Issued: December 11, 2019

Permit Number:

Date Modified: PROPOSED

574449

Date Expires: December 10, 2024

Issued To:
Gerdau AmeriSteel US Inc.

Installation Address:
801 Gerdau Drive
Jackson

Installation Description:
Steel Scrap Recycling Mill

01: One Steel Scrap Shredder with Ferrous and Non-Ferrous Separation, with Cyclone and Cyclone/Baghouse Controls
02: One Electric Arc Steel Melting Furnace (EAF) with Continuous Caster, EAF Dust Silo and Lime Storage Silos with Baghouse Controls
03: Nine Preheaters
04: One Reheat Furnace
05: Product Straightener Process with Baghouse Control
10: Auto Shredder Residue Dryer with Baghouse Control
11: Post Processing Heating Operation for Steel bars

Facility ID: 57-0189

Renewal Application Due Date:
Between March 15, 2024, and June 13, 2024

Primary SIC: 33

Information Relied Upon:
Renewal Application Dated June 14, 2018 and Revision applications dated August 23, 2018 and April 29, 2019.

(continued on the next page)

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

POST AT INSTALLATION ADDRESS

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SECTION A
GENERAL PERMIT CONDITIONS

A permit issued under the provisions of Tennessee Air Pollution Control Regulations (TAPCR) paragraph 1200-03-09-.02(11) is a permit issued pursuant to the requirements of Title V of the Federal Act and its implementing Federal regulations promulgated at 40 CFR, Part 70.

A1. **Definitions.** Terms not otherwise defined in the permit shall have the meaning assigned to such terms in the referenced regulation.

TAPCR 1200-03

A2. **Compliance requirement.** All terms and conditions in a permit issued pursuant to paragraph 1200-03-09-.02(11) including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act. The permittee shall comply with all conditions of its permit. Except for requirements specifically designated herein as not being federally enforceable (State Only), non-compliance with the permit requirements is a violation of the Federal Act and the Tennessee Air Quality Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Non-compliance with permit conditions specifically designated herein as not being federally enforceable (State Only) is a violation of the Tennessee Air Quality Act and may be grounds for these actions.

TAPCR 1200-03-09-.02(11)(e)2(i) and 1200-03-09-.02(11)(e)1(vi)(I)

A3. **Need to halt or reduce activity.** The need to halt or reduce activity is not a defense for noncompliance. It shall not be a defense for a 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 conditions of the permit. However, nothing in this item shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations.

TAPCR 1200-03-09-.02(11)(e)1(vi)(II)

A4. **The permit.** The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

TAPCR 1200-03-09-.02(11)(e)1(vi)(III)

A5. **Property rights.** The permit does not convey any property rights of any sort, or any exclusive privilege.

TAPCR 1200-03-09-.02(11)(e)1(vi)(IV)

A6. **Submittal of requested information.** The permittee shall furnish to the Technical Secretary, within a reasonable time, any information that the Technical Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or termination of the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Technical Secretary copies of records required to be kept by the permit. If the permittee claims that such information is confidential, the Technical Secretary may review that claim and hold the information in protected status until such time that the Board can hear any contested proceedings regarding confidentiality disputes. If the information is desired by EPA, the permittee may mail the information directly to EPA. Any claims of confidentiality for federal purposes will be determined by EPA.

TAPCR 1200-03-09-.02(11)(e)1(vi)(V)

A7. **Severability clause.** The requirements of this permit are severable. A dispute regarding one or more requirements of this permit does not invalidate or otherwise excuse the permittee from their duty to comply with the remaining portion of the permit.

TAPCR 1200-03-09.02(11)(e)1(v)

A8(SM1). **Fee payment.**

(a) The permittee shall pay an annual Title V emission fee based upon the responsible official's choice of actual emissions, allowable emissions, or a combination of actual and allowable emissions; and on the responsible official's choice of annual accounting period. An emission cap of 4,000 tons per year per regulated pollutant per major source SIC Code shall apply to actual or allowable based emission fees. A Title V annual emission fee will not be charged for emissions in excess of the cap. Title V annual emission fees will not be charged for carbon monoxide or for greenhouse gas pollutants solely because they are greenhouse gases.

(b) Title V sources shall pay allowable based emission fees until the beginning of the next annual accounting period following receipt of their initial Title V operating permit. At that time, the permittee shall begin paying their Title V fee based upon their choice of actual or allowable based fees, or mixed actual and allowable based fees. Once permitted, the Responsible Official may revise their existing fee choice by submitting a written request to the Division no later than December 31 of the annual accounting period for which the fee is due.

(c) When paying annual Title V emission fees, the permittee shall comply with all provisions of TAPCR Rule 1200-03-26-.02 and paragraph 1200-03-09-.02(11) applicable to such fees.

(d) Where more than one allowable emission limit is applicable to a regulated pollutant, the allowable emissions for the regulated pollutants shall not be double counted. Major sources subject to the provisions of TAPCR paragraph 1200-03-26-.02(9) shall apportion their emissions as follows to ensure that their fees are not double counted.

1. Sources that are subject to federally promulgated hazardous air pollutant standards that can be imposed under TAPCR Chapter 0400-30-38 or Chapter 1200-03-31 will place such regulated emissions in the regulated hazardous air pollutant (HAP) category.

2. A category of miscellaneous HAPs shall be used for hazardous air pollutants listed at TAPCR part 1200-03-26-.02(2)(i)12 that are not subject to federally promulgated hazardous air pollutant standards under 40 CFR 60, 61, or 63 or TAPCR chapter 1200-03-31.

3. HAPs that are also in the family of volatile organic compounds, particulate matter, or PM_{10} shall not be placed in either the regulated HAP category or miscellaneous HAP category.

4. Sources that are subject to a provision of TAPCR chapter 1200-03-16 New Source Performance Standards (NSPS) or chapter 0400-30-39 Standards of Performance for New Stationary Sources for pollutants that are neither particulate matter, PM_{10}, sulfur dioxide (SO_2), volatile organic compounds (VOC), nitrogen oxides (NO_x), or hazardous air pollutants (HAPs) will place such regulated emissions in an NSPS pollutant category.

5. The regulated HAP category, the miscellaneous HAP category, and the NSPS pollutant category are each subject to the 4,000 ton cap provisions of TAPCR subparagraph 1200-03-26-.02(2)(i).

6. Major sources that wish to pay annual emission fees for PM_{10} on an allowable emission basis may do so if they have a specific PM_{10} allowable emission standard. If a major source has a total particulate emission standard, but wishes to pay annual emission fees on an actual PM_{10} emission basis, it may do so if the PM_{10} actual emission levels are proven to the satisfaction of the Technical Secretary. The method to demonstrate the actual PM_{10} emission levels must be made as part of the source's major source operating permit in advance in order to exercise this option. The PM_{10} emissions reported under these options shall not be subject to fees under the family of particulate emissions. The 4,000 ton cap provisions of TAPCR subparagraph 1200-03-26-.02(2)(i) shall also apply to PM_{10} emissions.

TAPCR 1200-03-26-.02 and 1200-03-09-.02(11)(e)1(vii)

A9. **Permit revision not required.** A permit revision will not be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or process for changes that are provided for in the permit.

TAPCR 1200-03-09-.02(11)(e)1(viii)

A10. **Inspection and entry.** Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Technical Secretary or his authorized representative to perform the following for the purposes of determining compliance with the permit applicable requirements:

(a) Enter upon, at reasonable times, the permittee's premises where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

(d) As authorized by the Clean Air Act and Chapter 1200-03-10 of TAPCR, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(e) "Reasonable times" shall be considered to be customary business hours unless reasonable cause exists to suspect noncompliance with the Act, Division 1200-03 or any permit issued pursuant thereto and the Technical Secretary specifically authorizes an inspector to inspect a facility at any other time.

TAPCR 1200-03-09-.02(11)(e)3.(ii)

A11(SM1). Permit shield.

(a) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date of permit issuance, provided that:

1. Such applicable requirements are included and are specifically identified in the permit; or

2. The Technical Secretary, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

(b) Nothing in this permit shall alter or affect the following:

1. The provisions of section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section. Similarly, the provisions of T.C.A. §68-201-109 (emergency orders) including the authority of the Governor under the section;

2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Federal Act; or

4. The ability of EPA to obtain information from a source pursuant to section 114 of the Federal Act.

(c) Permit shield is granted to the permittee.

(d) The permit shield does not apply to permit changes made under the minor permit modification procedures of TAPCR subpart 1200-03-09-.02(11)(f)5(ii) nor the administrative permit amendment procedures of TAPCR part 1200-03-09-.02(11)(f)4, except that the permit shield may be extended for administrative permit amendments that meet the relevant requirements of TAPCR subparagraph 1200-03-09-.02(11)(e), subparagraph 1200-03-09-.02(11)(f) and subparagraph 1200-03-09-.02(11)(g) for significant permit modifications.

(e) The permit shield does not apply to off-permit changes made under the operational flexibility provisions of TAPCR part 1200-03-09-.02(11)(a)4.

TAPCR 1200-03-09-.02(11)(e)6 and 1200-03-09-.02(11)(f)4(iv)

A12. Permit renewal and expiration.

(a) An application for permit renewal must be submitted at least 180 days, but no more than 270 days prior to the expiration of this permit. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted.

(b) If the permittee submits a timely and complete application for permit renewal the source will not be considered to be operating without a permit until the Technical Secretary takes final action on the permit application, except as otherwise noted in paragraph 1200-03-09-.02(11).

(c) This permit, its shield provided in Condition A11, and its conditions will be extended and effective after its expiration date provided that the source has submitted a timely, complete renewal application to the Technical Secretary.

TAPCR 1200-03-09-.02(11)(f)2 and 3, 1200-03-09-.02(11)(d)1(i)(III), and 1200-03-09-.02(11)(a)2

A13. Reopening for cause.

(a) A permit shall be reopened and revised prior to the expiration of the permit under any of the circumstances listed below:

1. Additional applicable requirements under the Federal Act become applicable to the sources contained in this permit provided the permit has a remaining term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the permit expiration date of this permit, unless the original has been extended pursuant to 1200-03-09-.02(11)(a)2.

2. Additional requirements become applicable to an affected source under the acid rain program.

3. The Technical Secretary or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

4. The Technical Secretary or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(b) Proceedings to reopen and issue a permit shall follow the same proceedings as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists, and not the entire permit. Such reopening shall be made as expeditiously as practicable.

(c) Reopenings for cause shall not be initiated before a notice of such intent is provided to the permittee by the Technical Secretary at least 30 days in advance of the date that the permit is to be reopened except that the Technical Secretary may provide a shorter time period in the case of an emergency. An emergency shall be established by the criteria of T.C.A. 68-201-109 or other compelling reasons that public welfare is being adversely affected by the operation of a source that is in compliance with its permit requirements.

(d) If the Administrator finds that cause exists to terminate, modify, or revoke and reissue a permit as identified in A13, he is required under federal rules to notify the Technical Secretary and the permittee of such findings in writing. Upon receipt of such notification, the Technical Secretary shall investigate the matter in order to determine if he agrees or disagrees with the Administrator's findings. If he agrees with the Administrator's findings, the Technical Secretary shall conduct the reopening in the following manner:

1. The Technical Secretary shall, within 90 days after receipt of such notification, forward to EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate. If the Administrator grants additional time to secure permit applications or additional information from the permittee, the Technical Secretary shall have the additional time period added to the standard 90 day time period.

2. EPA will evaluate the Technical Secretary's proposed revisions and respond as to their evaluation.

3. If EPA agrees with the proposed revisions, the Technical Secretary shall proceed with the reopening in the same manner prescribed under Condition A13 (b) and Condition A13 (c).

4. If the Technical Secretary disagrees with either the findings or the Administrator that a permit should be reopened or an objection of the Administrator to a proposed revision to a permit submitted pursuant to Condition A13(d), he shall bring the matter to the Board at its next regularly scheduled meeting for instructions as to how he should proceed. The permittee shall be required to file a written brief expressing their position relative to the Administrator's objection and have a responsible official present at the meeting to answer questions for the Board. If the Board agrees that EPA is wrong in their demand for a permit revision, they shall instruct the Technical Secretary to conform to EPA's demand, but to issue the permit under protest preserving all rights available for litigation against EPA.

TAPCR 1200-03-09-.02(11)(f)6 and 7.

A14. **Permit transference.** An administrative permit amendment allows for a change of ownership or operational control of a source where the Technical Secretary determines that no other change in the permit is necessary, provided that the following requirements are met:

(a) Transfer of ownership permit application is filed consistent with the provisions of 1200-03-09-.03(6), and

(b) written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Technical Secretary.

TAPCR 1200-03-09-.02(11)(f)4(i)(IV) and 1200-03-09-.03(6)

A15. **Air pollution alert.** When the Technical Secretary has declared that an air pollution alert, an air pollution warning, or an air pollution emergency exists, the permittee must follow the requirements for that episode level as outlined in TAPCR 1200-03-09-.03(1) and TAPCR 1200-03-15-.03.

A16. **Construction permit required.** Except as exempted in TAPCR 1200-03-09-.04, or excluded in subparagraph TAPCR 1200-03-02-.01(1)(aa) or subparagraph TAPCR 1200-03-02-.01(1)(cc), this facility shall not begin the construction of a new air contaminant source or the modification of an air contaminant source which may result in the discharge of air contaminants without first having applied for and received from the Technical Secretary a construction permit for the construction or modification of such air contaminant source.

TAPCR 1200-03-09-.01(1)(a)

A17. **Notification of changes.** The permittee shall notify the Technical Secretary 30 days prior to commencement of any of the following changes to an air contaminant source which would not be a modification requiring a construction permit.

(a) change in air pollution control equipment;

(b) change in stack height or diameter; or

(c) change in exit velocity of more than 25 percent or exit temperature of more than 15 percent based on absolute temperature.

TAPCR 1200-03-09-.02(7)

A18(SM1). **Schedule of compliance.** The permittee will comply with any applicable requirement that becomes effective during the permit term on a timely basis and no later than required by the provisions of the new applicable requirement. If the permittee is not in compliance the permittee must submit a schedule for coming into compliance which must include a schedule of remedial measure(s), including an enforceable set of deadlines for specific actions.

TAPCR 1200-03-09-.02(11)(d)3, 1200-03-09-.03(8), 0400-30-38, 0400-30-39, and 40 CFR Part 70.5(c)

A19. **Title VI.**

(a) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR, Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to Section 82.156.

2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to Section 82.158.

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

(b) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR, Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

(c) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR, Part 82, Subpart G, Significant New Alternatives Policy Program.

A20. **112 (r).** Sources which are subject to the provisions of Section 112(r) of the federal Clean Air Act or any federal regulations promulgated thereunder, shall annually certify in writing to the Technical Secretary that they are properly following their accidental release plan. The annual certification is due in the office of the Technical Secretary no later than January 31 of each year. Said certification will be for the preceding calendar year.

TAPCR 1200-03-32-.03(3)

SECTION B

GENERAL CONDITIONS for MONITORING, REPORTING, and ENFORCEMENT

B1. **Recordkeeping.** Monitoring and related record keeping shall be performed in accordance with the requirements specified in the permit conditions for each individual permit unit. In no case shall reports of any required monitoring and record keeping be submitted less frequently than every six months.

(a) Where applicable, records of required monitoring information include the following:
- **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 analysis;
- **4.** The analytical techniques or methods used;
- **5.** The results of such analyses; and
- **6.** The operating conditions as existing at the time of sampling or measurement.

(b) Digital data accumulation which utilizes valid data compression techniques shall be acceptable for compliance determination as long as such compression does not violate an applicable requirement and its use has been approved in advance by the Technical Secretary.

TAPCR 1200-03-09-.02(11)(e)1(iii)

B2. **Retention of monitoring data.** The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

TAPCR 1200-03-09-.02(11)(e)1(iii)(II)II

B3. **Reporting.** Reports of any required monitoring and record keeping shall be submitted to the Technical Secretary in accordance with the frequencies specified in the permit conditions for each individual permit unit. Reports shall be submitted within 60 days of the close of the reporting period unless otherwise noted. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. Reports required under "State only requirements" are not required to be certified by a responsible official.

TAPCR 1200-03-09-.02(11)(e)1(iii)

B4. **Certification.** Except for reports required under "State Only" requirements, any application form, report or compliance certification submitted pursuant to the requirements of this permit shall contain certification by a responsible official of truth, accuracy and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

TAPCR 1200-03-09-.02(11)(d)4

B5. **Annual compliance certification.** The permittee shall submit annually compliance certifications with terms and conditions contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):

(a) The identification of each term or condition of the permit that is the basis of the certification;

(b) The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period; such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;

(c) The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in B5(b) above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion* or exceedance** as defined below occurred; and

(d) Such other facts as the Technical Secretary may require to determine the compliance status of the source.

* "Excursion" shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.

** "Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol. 79, No.144, July 28, 2014, pages 43661 through 43667

B6. **Submission of compliance certification.** The compliance certification shall be submitted to:

The Tennessee Department of Environment and Conservation Environmental Field Office specified in Section E of this permit	and	Air Enforcement Branch US EPA Region IV 61 Forsyth Street, SW Atlanta, Georgia 30303

TAPCR 1200-03-09-.02(11)(e)3(v)(IV)

B7(SM2). Reserved

B8. **Excess emissions reporting.**

(a) The permittee shall promptly notify the Technical Secretary when any emission source, air pollution control equipment, or related facility breaks down in such a manner to cause the emission of air contaminants in excess of the applicable emission standards contained in Division 1200-03 or any permit issued thereto, or of sufficient duration to cause damage to property or public health. The permittee must provide the Technical Secretary with a statement giving all pertinent facts, including the estimated duration of the breakdown. Violations of the visible emission standard which occur for less than 20 minutes in one day (midnight to midnight) need not be reported. Prompt notification will be within 24 hours of the malfunction and shall be provided by telephone to the Division's Nashville office. The Technical Secretary shall be notified when the condition causing the failure or breakdown has been corrected. In attainment and unclassified areas if emissions other than from sources designated as significantly impacting on a nonattainment area in excess of the standards will not and do not occur over more than a 24-hour period (or will not recur over more than a 24-hour period) and no damage to property and or public health is anticipated, notification is not required.

(b) Any malfunction that creates an imminent hazard to health must be reported by telephone immediately to the Division's Nashville office at (615) 532-0554 and to the State Civil Defense.

(c) A log of all malfunctions, startups, and shutdowns resulting in emissions in excess of the standards in Division 1200-03 or any permit issued thereto must be kept at the plant. All information shall be entered in the log no later than twenty-four (24) hours after the startup or shutdown is complete, or the malfunction has ceased or has been corrected. Any later discovered corrections can be added in the log as footnotes with the reason given for the change. This log must record at least the following:

1. Stack or emission point involved
2. Time malfunction, startup, or shutdown began and/or when first noticed
3. Type of malfunction and/or reason for shutdown
4. Time startup or shutdown was complete or time the air contaminant source returned to normal operation
5. The company employee making entry on the log must sign, date, and indicate the time of each log entry

The information under items 1. and 2. must be entered into the log by the end of the shift during which the malfunction or startup began. For any source utilizing continuous emission(s) monitoring, continuous emission(s) monitoring collection satisfies the above log keeping requirement.

TAPCR 1200-03-20-.03 and .04

B9. **Malfunctions, startups and shutdowns - reasonable measures required.** The permittee must take all reasonable measures to keep emissions to a minimum during startups, shutdowns, and malfunctions. These measures may include installation and use of alternate control systems, changes in operating methods or procedures, cessation of operation until the process equipment and/or air pollution control equipment is repaired, maintaining sufficient spare parts, use of overtime labor, use of outside consultants and contractors, and other appropriate means. Failures that are caused by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions. This provision does not apply to standards found in 40 CFR, Parts 60(Standards of performance for new stationary sources),

61(National emission standards for hazardous air pollutants) and 63(National emission standards for hazardous air pollutants for source categories).

TAPCR 1200-03-20-.02

B10. Reserved.

B11(SM1). **Report required upon the issuance of a notice of violation for excess emissions.** The permittee must submit, within twenty days after receipt of the notice of violation, the data required below. If this data has been made available to the Technical Secretary prior to the issuance of the notice of violation no further action is required of the violating source. However, if the source desires to submit additional information, then this must be submitted within the same 20-day time period. The minimum data requirements are:

(a) The identity of the stack and/or other emission point where the excess emission(s) occurred;

(b) The magnitude of the excess emissions expressed in pounds per hour and the units of the applicable emission limitation(s) and the operating data and calculations used in determining the magnitude of the excess emissions;

(c) The time and duration of the emissions;

(d) The nature and cause of such emissions;

(e) For malfunctions, the steps taken to correct the situation and the action taken or planned to prevent the recurrence of such malfunctions;

(f) The steps taken to limit the excess emissions during the occurrence reported, and

(g) If applicable, documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good operating practices for minimizing emissions.

Failure to submit the required report within the 20-day period specified shall preclude the admissibility of the data for determination of potential enforcement action.

TAPCR 1200-03-20-.06(2), (3) and (4)

SECTION C
PERMIT CHANGES

C1. **Operational flexibility changes.** The source may make operational flexibility changes that are not addressed or prohibited by the permit without a permit revision subject to the following requirements:

(a) The change cannot be subject to a requirement of Title IV of the Federal Act or Chapter 1200-03-30.

(b) The change cannot be a modification under any provision of Title I of the federal Act or Division 1200-03.

(c) Each change shall meet all applicable requirements and shall not violate any existing permit term or condition.

(d) The source must provide contemporaneous written notice to the Technical Secretary and EPA of each such change, except for changes that are below the threshold of levels that are specified in Rule 1200-03-09-.04.

(e) Each change shall be described in the notice including the date, any change in emissions, pollutants emitted, and any applicable requirements that would apply as a result of the change.

(f) The change shall not qualify for a permit shield under the provisions of part 1200-03-09-.02(11)(e)6.

(g) The permittee shall keep a record describing the changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. The records shall be retained until the changes are incorporated into subsequently issued permits.

TAPCR 1200-03-09-.02(11)(a)4 (ii)

C2. **Section 502(b)(10) changes.**

(a) The permittee can make certain changes without requiring a permit revision, if the changes are not modifications under Title I of the Federal Act or Division 1200-03 and the changes do not exceed the emissions allowable under the permit. The permittee must, however, provide the Administrator and Technical Secretary with written notification within a minimum of 7 days in advance of the proposed changes. The Technical Secretary may waive the 7 day advance notice in instances where the source demonstrates in writing that an emergency necessitates the change. Emergency shall be demonstrated by the criteria of TAPCR 1200-03-09-.02(11)(e)7 and in no way shall it include changes solely to take advantages of an unforeseen business opportunity. The Technical Secretary and EPA shall attach each such notice to their copy of the relevant permit.

(b) The written notification must be signed by a facility Title V responsible official and include the following:

1. a brief description of the change within the permitted facility;

2. the date on which the change will occur;

3. a declaration and quantification of any change in emissions;

4. a declaration of any permit term or condition that is no longer applicable as a result of the change; and

5. a declaration that the requested change is not a Title I modification and will not exceed allowable emissions under the permit.

(c) The permit shield provisions of TAPCR 1200-03-09-.02(11)(e)6 shall not apply to Section 502(b)(10) changes.

TAPCR 1200-03-09-.02(11)(a)4 (i)

C3. **Administrative amendment.**

(a) Administrative permit amendments to this permit shall be in accordance with 1200-03-09-.02(11)(f)4. The source may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request.

(b) The permit shield shall be extended as part of an administrative permit amendment revision consistent with the provisions of TAPCR 1200-03-09-.02(11)(e)6 for such revisions made pursuant to item (c) of this condition which meet the relevant requirements of TAPCR 1200-03-09-.02(11)(e), TAPCR 1200-03-09-.02(11)(f) and TAPCR 1200-03-09-.02(11)(g) for significant permit modifications.

(c) Proceedings to review and grant administrative permit amendments shall be limited to only those parts of the permit for which cause to amend exists, and not the entire permit.

TAPCR 1200-03-09-.02(11)(f)4

C4. **Minor permit modifications.**

(a) The permittee may submit an application for a minor permit modification in accordance with TAPCR 1200-03-09-.02(11)(f)5(ii).

(b) The permittee may make the change proposed in its minor permit modification immediately after an application is filed with the Technical Secretary.

(c) Proceedings to review and modify permits shall be limited to only those parts of the permit for which cause to modify exists, and not the entire permit.
(d) Minor permit modifications do not qualify for a permit shield.

TAPCR 1200-03-09-.02(11)(f)5(ii)

C5. **Significant permit modifications.**
(a) The permittee may submit an application for a significant modification in accordance with TAPCR 1200-03-09-.02(11)(f)5(iv).
(b) Proceedings to review and modify permits shall be limited to only those parts of the permit for which cause to modify exists, and not the entire permit.

TAPCR 1200-03-09-.02(11)(f)5(iv)

C6. **New construction or modifications.**
Future construction at this facility that is subject to the provisions of TAPCR 1200-03-09-.01 shall be governed by the following:
(a) The permittee shall designate in their construction permit application the route that they desire to follow for the purposes of incorporating the newly constructed or modified sources into their existing operating permit. The Technical Secretary shall use that information to prepare the operating permit application submittal deadlines in their construction permit.
(b) Sources desiring the permit shield shall choose the administrative amendment route of TAPCR 1200-03-09-.02(11)(f)4 or the significant modification route of TAPCR 1200-03-09-.02(11)(f)5(iv).
(c) Sources desiring expediency instead of the permit shield shall choose the minor permit modification procedure route of TAPCR 1200-03-09-.02(11)(f)5(ii) or group processing of minor modifications under the provisions of TAPCR 1200-03-09-.02(11)(f)5(iii) as applicable to the magnitude of their construction.

TAPCR 1200-03-09-.02(11)(d) 1(i)(V)

SECTION D

GENERAL APPLICABLE REQUIREMENTS

D1(SM1). **Visible emissions.**

(a) With the exception of air emission sources exempt from the requirements of TAPCR Chapter 1200-03-05 and air emission sources for which a different opacity standard is specifically provided elsewhere in this permit, the permittee shall not cause, suffer, allow or permit discharge of a visible emission from any air contaminant source with an opacity in excess of twenty (20) percent for an aggregate of more than five (5) minutes in any one (1)hour or more than 20 minutes in any twenty-four (24) hour period; provided, however, that for fuel burning installations with fuel burning equipment of input capacity greater than 600 million btu per hour, the permittee shall not cause, suffer, allow, or permit discharge of a visible emission from any fuel burning installation with an opacity in excess of 20 percent (6-minute average) except for one six minute period per one hour of not more than 40 percent opacity. Sources constructed or modified after July 7, 1992, shall utilize 6-minute averaging.

(b) Consistent with the requirements of TAPCR Chapter 1200-03-20, due allowance may be made for visible emissions in excess of that permitted under TAPCR Chapter 1200-03-05 which are necessary or unavoidable due to routine startup and shutdown conditions. The facility shall maintain a continuous, current log of all excess visible emissions showing the time at which such conditions began and ended and that such record shall be available to the Technical Secretary or an authorized representative upon request.

TAPCR 1200-03-05-.01(1), TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.02(1)

D2. **General provisions and applicability for non-process gaseous emissions.** Any person constructing or otherwise establishing a non-portable air contaminant source emitting gaseous air contaminants after April 3, 1972, or relocating an air contaminant source more than 1.0 km from the previous position after November 6, 1988, shall install and utilize the best equipment and technology currently available for controlling such gaseous emissions.

TAPCR 1200-03-06-.03(2)

D3. **Non-process emission standards.** The permittee shall not cause, suffer, allow, or permit particulate emissions from non-process sources in excess of the standards in TAPCR 1200-03-06.

D4. **General provisions and applicability for process gaseous emissions.** Any person constructing or otherwise establishing an air contaminant source emitting gaseous air contaminants after April 3, 1972, or relocating an air contaminant source more than 1.0 km from the previous position after November 6, 1988, shall install and utilize equipment and technology which is deemed reasonable and proper by the Technical Secretary.

TAPCR 1200-03-07-.07(2)

D5. **Particulate emissions from process emission sources.** The permittee shall not cause, suffer, allow, or permit particulate emissions from process sources in excess of the standards in TAPCR 1200-03-07.

D6. **Sulfur dioxide emission standards.** The permittee shall not cause, suffer, allow, or permit Sulfur dioxide emissions from process and non-process sources in excess of the standards in TAPCR 1200-03-14. Regardless of the specific emission standard, new process sources shall utilize the best available control technology as deemed appropriate by the Technical Secretary of the Tennessee Air Pollution Control Board.

D7. **Fugitive Dust.**

(a) The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, grading of roads, or the clearing of land;

2. Application of asphalt, water, or suitable chemicals on dirt roads, material stock piles, and other surfaces which can create airborne dusts;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

(b) The permittee shall not cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five (5) minutes per hour or twenty (20) minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in Chapter 1200-03-20.

TAPCR 1200-03-08

D8. **Open burning.** The permittee shall comply with the TAPCR 1200-03-04 for all open burning activities at the facility.

TAPCR 1200-03-04

D9. **Asbestos.** Where applicable, the permittee shall comply with the requirements of Tenn. Comp. R. and Regs.1200-03-11-.02(2)(d) when conducting any renovation or demolition activities at the facility.

TAPCR 1200-03-11-.02(2)(d) and 40 CFR, Part 61

D10(SM1). Annual certification of compliance. The generally applicable requirements set forth in Section D of this permit are intended to apply to activities and sources that are insignificant emission units or activities. By annual certification of compliance with the conditions in this Section the permittee shall be considered to meet the monitoring and related record keeping and reporting requirements of TAPCR subpart 1200-03-09-.02(11)(e)1(iii) and part 1200-03-10-.04(2)(b)1 and the compliance requirements of TAPCR subpart 1200-03-09-.02(11)(e)3(i). The permittee shall submit compliance certification for these conditions annually.

D11(SM1). Emission Standards for Hazardous Air Pollutants. The permittee shall comply with all applicable requirements of TAPCR Chapter 0400-30-38 for all emission sources subject to a requirement contained therein.

D12(SM1). Standards of Performance for New Stationary Sources. The permittee shall comply with all applicable requirements of TAPCR chapters 0400-30-39 and 1200-03-16 for all emission sources subject to a requirement contained therein.

D13(SM1). Gasoline Dispensing Facilities. The permittee shall comply with all applicable requirements of TAPCR Rule 1200-03-18-.24 for all emission sources subject to a requirement contained therein.

D14(SM1). Internal Combustion Engines.

(a) All stationary reciprocating internal combustion engines, including engines deemed insignificant activities and insignificant emission units, shall comply with the applicable provisions of TAPCR Rule 0400-30-38-.01.
(b) All stationary compression ignition internal combustion engines, including engines deemed insignificant activities and insignificant emission units, shall comply with the applicable provisions of TAPCR Chapter 0400-30-39.
(c) All stationary spark ignition internal combustion engines, including engines deemed insignificant activities and insignificant emission units, shall comply with the applicable provisions of TAPCR Chapter 0400-30-39.

TAPCR 0400-30-38 and 39

SECTION E

SOURCE SPECIFIC EMISSION STANDARDS, OPERATING LIMITATIONS, and MONITORING, RECORDKEEPING and REPORTING REQUIREMENTS

57-0189	**Facility Description:**	Scrap Steel Recycling Mill with one Electric Arc Steel Melting Furnace (EAF) with Continuous Caster and Storage Silos with baghouses, one Reheat Furnace, one Product Straightener with baghouse control, nine Preheaters, and one Steel Scrap Shredder.

Conditions E1 through E3-11 apply to all sources in Section E of this permit unless otherwise noted.

E1(SM2). Fee payment

FEE EMISSIONS SUMMARY TABLE FOR MAJOR SOURCE 57-0189

REGULATED POLLUTANTS	ALLOWABLE EMISSIONS (tons per AAP)	ACTUAL EMISSIONS (tons per AAP)	COMMENTS
PARTICULATE MATTER (PM)	**258.97**	**AEAR**	**Includes all fee emissions. Includes PM_{10}.**
PM_{10}	**N/A**	**N/A**	
SO_2	**213.47**	**AEAR**	**Includes all fee emissions.**
VOC	**200.61**	**AEAR**	**Includes all fee emissions.**
NO_X	**600.08**	**AEAR**	**Includes all fee emissions.**
CATEGORY OF MISCELLANEOUS HAZARDOUS AIR POLLUTANTS (HAP WITHOUT A STANDARD)*			
VOC FAMILY GROUP	**N/A**	**N/A**	
NON-VOC GASEOUS GROUP	**N/A**	**N/A**	
PM FAMILY GROUP	**4.91**	**AEAR**	**Lead, included in PM emissions above**
CATEGORY OF SPECIFIC HAZARDOUS AIR POLLUTANTS (HAP WITH A STANDARD)**			
VOC FAMILY GROUP	**N/A**	**N/A**	
NON-VOC GASEOUS GROUP	**N/A**	**N/A**	
PM FAMILY GROUP	**N/A**	**N/A**	
CATEGORY OF NSPS POLLUTANTS NOT LISTED ABOVE***			
EACH NSPS POLLUTANT NOT LISTED ABOVE	**N/A**	**N/A**	

NOTES

AAP The **Annual Accounting Period** (**AAP**) is a twelve (12) consecutive month period that **either (a) begins each July 1st and ends June 30th of the following year when fees are paid on a fiscal year basis, or (b) begins January 1st and ends December 31st of the same year when paying on a calendar year basis.** The **Annual Accounting Period** at the time of modification issuance **began July 1, 2023, and ends June 30, 2024.** The next Annual Accounting Period begins **July 1, 2024,** and ends **June 30, 2025,** unless a request to change the annual accounting period is submitted by the responsible official as required by subparagraph 1200-03-26-.02(9)(b) and approved by the Technical Secretary**.** If the permittee wishes to revise their annual accounting period or their annual emission fee basis as allowed by subparagraph 1200-03-26-.02(9)(b), the responsible official must submit the request to the Division in writing on or before December 31 of the annual accounting period for which the fee is due. If a change in fee basis from allowable emissions to actual emissions for any pollutant is requested, the request from the responsible official must include the methods that will be used to determine actual emissions.

N/A **N/A** indicates that no emissions are specified for fee computation.

AEAR If the permittee is paying annual emission fees on an actual emissions basis, **AEAR** indicates that an **A**ctual **E**missions **A**nalysis is **R**equired to determine the actual emissions of:

(1) **each regulated pollutant** (Particulate matter, SO_2, VOC, NO_X and so forth. See TAPCR 1200-03-26-.02(2)(i) for the definition of a regulated pollutant.),
(2) **each pollutant group** (VOC Family, Non-VOC Gaseous, and Particulate Family), and
(3) the **Miscellaneous HAP Category**
(4) the **Specific HAP Category**, and
(5) the **NSPS Category**
under consideration during the **Annual Accounting Period**.

***** **Category Of Miscellaneous HAP (HAP Without A Standard):** This category is made-up of hazardous air pollutants that do not have a federal or state standard. Each HAP is classified into one of three groups, the **VOC Family** group**, the Non-VOC Gaseous** group**,** or the **Particulate (PM) Family** group**. For fee computation**, the **Miscellaneous HAP Category** is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i) of the TAPCR.

****** **Category Of Specific HAP (HAP With A Standard):** This category is made-up of hazardous air pollutants (HAP) that are subject to Federally promulgated Hazardous Air Pollutant Standards that can be imposed under Chapter 1200-03-11 or Chapter 1200-03-31. Each individual hazardous air pollutant is classified into one of three groups, the **VOC Family** group**, the Non-VOC Gaseous** group**,** or the **Particulate (PM) Family** group**. For fee computation**, each individual hazardous air pollutant of the **Specific HAP Category** is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i) of the TAPCR.

******* **Category Of NSPS Pollutants Not Listed Above:** This category is made-up of each **N**ew **S**ource **P**erformance **S**tandard (**NSPS**) pollutant whose emissions are not included in the **PM**, **SO_2, VOC** or **NO_X** emissions from each source in this permit. **For fee computation**, each **NSPS pollutant not listed above** is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i) of the TAPCR.

END NOTES

The permittee shall:

(1) Pay Title V **annual emission fees**, on the emissions and year bases requested by the responsible official and approved by the Technical Secretary, for each annual accounting period (AAP) by the payment deadline(s) established in TAPCR 1200-03-26-.02(9)(g). Fees may be paid on an **actual**, **allowable**, or **mixed** emissions basis; and on either a **state fiscal year** or a **calendar year**, provided the requirements of TAPCR 1200-03-26-.02(9)(b) are met. If any part of any fee imposed under TAPCR 1200-03-26-.02 is not paid within fifteen (15) days of the due date, penalties shall at once accrue as specified in TAPCR 1200-03-26-.02(8).

(2) Sources paying annual emissions fees on an allowable emissions basis: pay annual allowable based emission fees for each annual accounting period no later than April 1 of each year pursuant to TAPCR 1200-03-26-.02(9)(d).

(3) Sources paying annual emissions fees on an actual emissions basis: prepare an **actual emissions analysis** for each AAP and pay **actual based emission fees** pursuant to TAPCR 1200-03-26-.02(9)(d). The **actual emissions analysis** shall include:
   (a) the completed **Fee Emissions Summary Table**,
   (b) each **actual emissions analysis** required, and
   (c) the actual emission records for each pollutant and each source as required for actual emission fee determination, or a summary of the actual emission records required for fee determination, as specified by the Technical Secretary or the Technical Secretary's representative. These calculations must be based on the annual fee basis approved by the Technical Secretary (a state fiscal year [July 1 through June 30] or a calendar year [January 1 through December 31]). These records shall be used to complete the **actual emissions analyses** required by the above **Fee Emissions Summary Table**.

(4) Sources paying annual emissions fees on a mixed emissions basis: for all pollutants and all sources for which the permittee has chosen an actual emissions basis, prepare an **actual emissions analysis** for each AAP and pay **actual based emission fees** pursuant to TAPCR 1200-03-26-.02(9)(d). The **actual emissions analysis** shall include:
   (a) the completed **Fee Emissions Summary Table**,
   (b) each **actual emissions analysis** required, and
   (c) the actual emission records for each pollutant and each source as required for actual emission fee determination, or a summary of the actual emission records required for fee determination, as specified by the Technical Secretary or the Technical Secretary's

representative. These calculations must be based on the fee bases approved by the Technical Secretary (payment on an actual or mixed emissions basis) and payment on a state fiscal year (July 1 through June 30) or a calendar year (January 1 through December 31). These records shall be used to complete the **actual emissions analysis**.

For all pollutants and all sources for which the permittee has chosen an allowable emissions basis, pay allowable based emission fees pursuant to TAPCR 1200-03-26-.02(9)(d).

(5) When paying on an actual or mixed emissions basis, submit the **actual emissions analyses** at the time the fees are paid in full.

The annual emission fee due dates are specified in TAPCR 1200-03-26-.02(9)(g) and are dependent on the Responsible Official's choice of fee bases as described above. If any part of any fee imposed under TAPCR 1200-03-26-.02 is not paid within fifteen (15) days of the due date, penalties shall at once accrue as specified in TAPCR 1200-03-26-.02(8). Emissions for regulated pollutants shall not be double counted as specified in Condition A8(d) of this permit.

Payment of the fee due and the actual emissions analysis (if required) shall be submitted to The Technical Secretary at the following address:

Payment of Fee to:
The Tennessee Department of Environment and Conservation
Division of Fiscal Services
Consolidated Fee Section – APC
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 10th Floor
Nashville, Tennessee 37243

and

Actual Emissions Analyses to:
The Tennessee Department of Environment and Conservation
Division of Air Pollution Control
Emission Inventory Program
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, Tennessee 37243

or

An electronic copy (PDF) of actual emissions analysis can also be submitted to: apc.inventory@tn.gov

E2(SM2). Reporting requirements.

(a) **Semiannual reports.** Semiannual reports shall cover the six-month periods from January 1 through June 30 and July 1 through December 31 of each calendar year, and shall be submitted within 60 days after the end of each six-month period. The first semiannual report following issuance of this permit shall cover the following permits and reporting periods:

Permit Number	Reporting Period Begins	Reporting Period Ends
565713	July 1, 2019	Day before new permit issuance
574449	Issuance date of new permit	December 31, 2019

These semiannual reports shall include:

(1) Any monitoring and recordkeeping required by **Conditions E5-3, E5-4, E6-4, E7-9, E9-10, E10-2, E10-3, E11-4(SM1),** and **E12-3(SM2)** of this permit. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.

(2) The visible emission evaluation readings from **Conditions E3-1, E8-8, and E9-9** of this permit, if required. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.

(3) Identification of all instances of deviations from **ALL PERMIT REQUIREMENTS**.

These reports must be certified by a responsible official consistent with Condition B4 of this permit and shall be submitted to The Technical Secretary at the address in Condition E2(b) of this permit.

TAPCR 1200-03-09-.02(11)(e)1.(iii)

(b) **Annual compliance certification.** The permittee shall submit annually compliance certifications with each term or condition contained in Sections A, B, D, and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):

(1) The identification of each term or condition of the permit that is the basis of the certification;

(2) The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period; such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;

(3) The status of compliance with each term or condition of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in E2(b)2 above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion* or exceedance** as defined below occurred; and

(4) Such other facts as the Technical Secretary may require to determine the compliance status of the source.

* "Excursion" shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.

** "Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

Annual compliance certifications shall cover the 12-month period from January 1 through December 31 of each calendar year and shall be submitted within 60 days after the end of each 12-month period. The first annual compliance certification following issuance of this permit shall cover the following permits and reporting periods:

Permit Number	Reporting Period Begins	Reporting Period Ends
565713	January 1, 2019	Day before new permit issuance
574449	Issuance date of new permit	December 31, 2019

These certifications shall be submitted to: **TN APCD** and **EPA**.

Division of Air Pollution Control
ATTN: Jackson Field Office
1625 Hollywood Drive
Jackson, Tennessee 38401
Or
E-mail: APC.JackEFO@tn.gov

and

Air Enforcement Branch
US EPA Region IV
61 Forsyth Street, SW
Atlanta, Georgia 30303

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol. 79, No.144, July 28, 2014, pages 43661 through 43667
TAPCR 1200-03-09-.02(11)(e)3.(v)

(c) **NESHAP (MACT) Reports for 40 CFR 63, Subpart YYYYY.** Pursuant to 40 CFR §63.10685(c) (and **Condition E4-4(c)**), the permittee shall submit semiannual compliance reports to the Technical Secretary for the control of contaminants from scrap according to the requirements in 40 CFR §63.10(e). Semiannual reports shall cover the six-month periods from January 1 through June 30 and July 1 through December 31 of each calendar year, and shall be submitted within 60 days after the end of each six-month period. The first semiannual report following issuance of this permit shall cover the following permits and reporting periods:

Permit Number	Reporting Period Begins	Reporting Period Ends
565713	July 1, 2019	Day before new permit issuance
574449	Issuance date of new permit	December 31, 2019

Reports shall be submitted to:

Tennessee Department of Environment and Conservation
Division of Air Pollution Control
Permit Program
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, Tennessee 37243

or

Adobe portable document format (PDF) to:
Air.Pollution.Control@tn.gov

(d) **NSPS Reports for 40 CFR 60, Subpart AA.** Pursuant to 40 CFR §60.276(d) (and **Condition E5-2**), all shop opacity observations in excess of the emission limit specified in 40 CFR §60.272(a)(3) (and **Condition E5-2**), shall indicate a period of excess emission, and shall be reported to the Technical Secretary semiannually, according to 40 CFR §60.7(c). Semiannual reports shall cover the six-month periods from January 1 through June 30 and July 1 through December 31 of each calendar year, and shall be submitted within 30 days after the end of each six-month period. The first semiannual report following issuance of this permit shall cover the following permits and reporting periods:

Permit Number	Reporting Period Begins	Reporting Period Ends
565713	July 1, 2019	Day before new permit issuance
574449	Issuance date of new permit	December 31, 2019

Reports shall be submitted to:

Tennessee Department of Environment and Conservation
Division of Air Pollution Control
Compliance Validation Program
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, Tennessee 37243

or

Adobe portable document format (PDF) to:
Air.Pollution.Control@tn.gov

(e) **Retention of Records.** All records required by any condition in Section E of this permit must be retained for a period of not less than five years. Additionally, these records shall be kept available for inspection by the Technical Secretary or his representative.

TAPCR 1200-03-09-.02(11)(e)1.(iii)(II)II

E3. General Permit Requirements

E3-1. Visible emissions from the sources at this facility, unless otherwise noted, shall not exhibit greater than 20% opacity, except for one six-minute period in any one hour period, and for no more than four six-minute periods in any 24 hour period. Visible emissions shall be determined by EPA Method 9, as published in the current 40- CFR 60, Appendix A (6 minute average).

TAPCR 1200-03-05-.01(3) and the agreement letter dated October 22, 2019

Compliance Method: The permittee shall assure compliance with the opacity limitation by utilizing the Division's opacity matrix dated June 18, 1996 and amended September 11, 2013 for EPA Method 9 that is enclosed as **Attachment 1**.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

E3-2. At the time of permit renewal, the potential to emit hazardous air pollutants (HAP) from this facility was less than the major source applicability thresholds of 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAP.

The permittee must apply for and receive a significant permit modification in accordance with the procedures in Chapter 1200-03-09 of the TAPCR prior to making any changes such that the potential to emit HAP from the facility will exceed these thresholds.

TAPCR 1200-03-09-.03(8)

E3-3. 1) No person shall cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:

(a) Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, grading of roads, or the clearing of land;
(b) Application of asphalt, water, or suitable chemicals on dirt roads, material stock piles, and other surfaces which can create airborne dusts;
(c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

2) No person shall cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five minutes per hour or 20 minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in TAPCR 1200-03-20. Fugitive emissions from this source shall be determined by Tennessee Visible Emissions Evaluation Method 4 as adopted by the Tennessee Air Pollution Control Board on April 16, 1986.

TAPCR 1200-03-08-.01(1) and 1200-03-08-.01(2)

E3-4. For fee purposes, the permittee shall calculate the sum of the actual emissions from each emission source on a monthly basis.

TAPCR 1200-03-26-.02(9)(g)1.(i)

Compliance Method: The sum of the actual emissions, as calculated on a monthly basis in accordance with **Conditions E6-4, E7-9, E9-10, and E10-3**, shall be entered into the table provided below:

FEE ACCOUNTING PERIOD OF JULY 1, 20_____ TO JUNE 30, 20_____ SOURCE 57-0189

Source	PM (ton per year)	SO_2 (tons per year)	VOC (tons per year)	NOx (tons per year)	Lead (tons per year)
-01					
-02					
-04					
-05					
Total					

No additional fees shall be paid on lead as it is emitted as particulate matter (PM).

E3-5. Visible emissions from roads and parking areas shall not exhibit greater than 10% opacity utilizing Tennessee Visible Emissions Evaluation (TVEE) Method 1, as adopted by the Tennessee Air Pollution Control Board on April 29, 1982, as amended on September 15, 1982 and August 24, 1984.

TAPCR 1200-03-08-.03

E3-6. The following recordkeeping requirements shall apply to this facility:

a) For monthly recordkeeping, all data, including the results of all calculations, must be entered into the log no later than 30 days from the end of the month for which the data is required.
b) For weekly recordkeeping, all data, including the results of all calculations, must be entered into the log no later than seven days from the end of the week for which the data is required.
c) For daily recordkeeping, all data, including the results of all calculations, must be entered into the log no later than seven days from the end of the day for which the data is required.

d) All maintenance activities required by **Condition E3-7** (including any ongoing maintenance that has not been completed) shall be entered into the maintenance log no later than 30 days following the start of the maintenance.

Logs and records specified in this permit shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative and shall be retained for a period of not less than five years unless otherwise noted. Logs and records contained in this permit are based on a recommended format. Any logs that have an alternative format may be utilized provided such logs contain the same or equivalent information that is required. Computer-generated logs are also acceptable.

TAPCR 1200-03-10-.02(2)(a)

E3-7. The permittee shall maintain and repair the emission source, associated air pollution control device(s), and compliance assurance monitoring equipment as required to maintain and assure compliance with the specified emission limits.

TAPCR 1200-03-09-.03(8)

Compliance Method: Records of all repair and maintenance activities required above shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than five years. The date each maintenance and repair activity began shall be entered in the log no later than 30 days following the start of the repair or maintenance activity, and the completion date shall be entered in the log no later than 30 days from activity completion.

E3-8. Identification of Responsible Official, Technical Contact, and Billing Contact

(a) The application that was utilized in the preparation of this permit is dated June 15, 2018, and signed by Dean Perry, Vice President/General Manager of the permitted facility. Notification was received April 15, 2019 that Josh Wigger, Vice President/General Manager, is now the Responsible Official. If this person terminates employment or is assigned different duties and is no longer a Responsible Official for this facility as defined in part 1200-03-09-.02(11)(b)21 of the Tennessee Air Pollution Control Regulations, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within thirty (30) days of the change. The notification shall include the name and title of the new Responsible Official and certification of truth and accuracy. All representations, agreement to terms and conditions, and covenants made by the former Responsible Official that were used in the establishment of the permit terms and conditions will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements, and/or covenants.

(b) The application that was utilized in the preparation of this permit is dated June 15, 2018, and identifies Will Ownby, Environmental Manager, as the Principal Technical Contact for the permitted facility. If this person terminates employment or is assigned different duties and is no longer the Principal Technical Contact for this facility, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within thirty (30) days of the change. The notification shall include the name and title of the new Principal Technical Contact and certification of truth and accuracy.

(c) The application that was utilized in the preparation of this permit is dated June 15, 2018, and identifies Will Ownby, Environmental Manager, as the Billing Contact for the permitted facility. If this person terminates employment or is assigned different duties and is no longer the Billing Contact for this facility, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within thirty (30) days of the change. The notification shall include the name and title of the new Billing Contact and certification of truth and accuracy.

E3-9(SM2). Insignificant Activities

Insignificant activities as stated by the permittee in the Title V Application per Rule 1200-03-09-.04(5) are listed below. Additional insignificant activities may be added and operated at any time with the provision that a written notification shall be submitted to the Technical Secretary including an updated APC 2 application form along with a truth, accuracy, and completeness statement signed by a responsible official. The permit may be updated to include additional insignificant sources by means of an administrative amendment, if necessary.

Insignificant Activity	TAPCR 1200-03-09
Roll Spray Welding	-.04(5)(a)4.(i)
All Storage Tanks with a capacity of ≤10,000 gallons	-.04(5)(f)17
Diesel Fuel Storage Tanks, capacity ≤40,000 gallons	-.04(5)(f)17
Gas Torches	-.04(5)(g)17
Gas Cutting Torches	-.04(5)(g)17
Hot Water Gas Heater	-.04(5)(a)4.(i)
Unpaved Roads	-.04(5)(f)(1)
Paved Roads	-.04(5)(f)(2)
Gas Space Heaters	-.04(5)(f)(14)
Gas Rooftop Heating Units	-.04(5)(f)(14)
Parts Washers (5)	-.04(5)(f)(22)
Emergency Generators (4)	-.04(5)(f)(37)

E4. National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements

E4-1. Electric Arc Furnace (EAF) Steelmaking Facilities that are an area source of hazardous air pollutant (HAP) emissions are subject to 40 CFR 63, Subpart YYYYY – *National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities*. This facility is considered an existing affected facility pursuant to §63.10680(b)(1), and the permittee shall comply with all applicable requirements of Subpart YYYYY. The applicable requirements of Subpart YYYYY are incorporated into this permit pursuant to TAPCR 1200-03-09-.03(8).

E4-2. *Chlorinated plastics, lead, and free organic liquids.* For metallic scrap utilized in the EAF at this facility, the permittee must comply with the requirements in either paragraph (a) or (b) of this condition. The permittee may have certain scrap at this facility subject to paragraph (a) of this condition and other scrap subject to paragraph (b) of this condition provided the scrap remains segregated until charge make-up.

(a) *Pollution prevention plan.* For the production of steel other than leaded steel, the permittee must prepare and implement a pollution prevention plan for metallic scrap selection and inspection to minimize the amount of chlorinated plastics, lead, and free organic liquids that is charged to the furnace. For the production of leaded steel, the permittee must prepare and implement a pollution prevention plan for scrap selection and inspection to minimize the amount of chlorinated plastics and free organic liquids in the scrap that is charged to the furnace. The permittee must submit the scrap pollution prevention plan to the Technical Secretary for approval. The permittee must operate according to the plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the Technical Secretary within 60 days following disapproval of a plan. The permittee may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the Technical Secretary. The permittee must keep a copy of the plan onsite, and must provide training on the plan's requirements to all plant personnel with materials acquisition or inspection duties. Each plan must include the information in paragraphs (1)(i) through (iii) of this condition:

(i) Specifications that 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.

(ii) A requirement in the permittee's scrap specifications for removal (to the extent practicable) of lead-containing components (such as batteries, battery cables, and wheel weights) from the scrap, except for scrap used to produce leaded steel.

(iii) Procedures for determining if the requirements and specifications in paragraph (1) of this condition are met (such as visual inspection or periodic audits of scrap providers) and procedures for taking corrective actions with vendors whose shipments are not within specifications.

(iv) The requirements of paragraph (1) of this section do not apply to the routine recycling of baghouse bags or other internal process or maintenance materials in the furnace. These exempted materials must be identified in the pollution prevention plan.

(b) *Restricted metallic scrap.* For the production of steel other than leaded steel, the permittee must not charge to a furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, lead-containing components, chlorinated plastics, or free organic liquids. For the production of leaded steel, the permittee must not charge to the furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, chlorinated plastics, or free organic liquids. This restriction does not apply to any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed or cleaned to the extent practicable such that the materials do not include lead components, chlorinated

plastics, or free organic liquids. This restriction does not apply to motor vehicle scrap that is charged to recover the chromium or nickel content if the permittee meets the requirements in **Condition E4-3(c)**.

40 CFR §63.10685(a)

Compliance Method: Compliance with this requirement shall be demonstrated by complying with the Scrap Pollution Prevention Plan (SPPP) and Supplement to the SPPP as outlined in **Attachments 2 and 3.**

E4-3. *Mercury requirements.* For scrap containing motor vehicle scrap, the permittee must procure the scrap pursuant to one of the compliance options in paragraphs (a), (b), or (c) of this condition for each scrap provider, contract, or shipment. For scrap that does not contain motor vehicle scrap, the permittee must procure the scrap pursuant to the requirements in paragraph (d) of this condition for each scrap provider, contract, or shipment. The permittee may have one scrap provider, contract, or shipment subject to one compliance provision and others subject to another compliance provision.

(a) *Site-specific plan for mercury switches.* The permittee must comply with the requirements in paragraphs (a)(i) through (v) of this condition.

(i) The permittee must include a requirement in this facility's scrap specifications for removal of mercury switches from vehicle bodies used to make the scrap.

(ii) The permittee must prepare and operate according to a plan demonstrating how this facility will implement the scrap specification in paragraph (a)(i) of this condition for removal of mercury switches. The permittee must submit the plan to the Technical Secretary for approval. The permittee must operate according to this plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the Technical Secretary within 60 days following disapproval of a plan. The permittee may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the Technical Secretary. The Technical Secretary may change the approval status of the plan upon 90-days written notice based upon the semiannual compliance report or other information. The plan must include:

(A) A means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper management of the mercury switches removed from that scrap as required under the rules implementing subtitle C of the Resource Conservation and Recovery Act (RCRA) (40 CFR parts 261 through 265 and 268). The plan must include documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the Technical Secretary, the permittee must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols;

(B) Provisions for obtaining assurance from scrap providers that motor vehicle scrap provided to the facility meet the scrap specification;

(C) Provisions for periodic inspections or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap and that the mercury switches removed are being properly managed, including the minimum frequency such means of corroboration will be implemented; and

(D) Provisions for taking corrective actions (i.e., actions resulting in scrap providers removing a higher percentage of mercury switches or other mercury-containing components) if needed, based on the results of procedures implemented in paragraph (a)(ii)(C) of this condition).

(iii) The permittee must require each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to this facility during the previous year and the basis for the estimate. The Technical Secretary may request documentation or additional information at any time.

(iv) The permittee must establish a goal for each scrap provider to remove at least 80 percent of the mercury switches. Although a site-specific plan approved under paragraph (a) of this condition may require only the removal of convenience light switch mechanisms, the Technical Secretary will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal.

(v) For each scrap provider, the permittee must submit semiannual progress reports to the Technical Secretary that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches removed, and certification that the removed mercury switches were recycled at RCRA-permitted facilities or otherwise properly managed pursuant to RCRA subtitle C regulations referenced in paragraph (a)(ii)(A) of this condition. This information can be submitted in aggregated form and does not have to be submitted for each scrap provider, contract, or shipment. The Technical Secretary may change the approval status of a site-specific plan following 90-days notice based on the progress reports or other information.

(b) *Option for approved mercury programs.* The permittee must certify in the notification of compliance status that the permittee participates in and purchases motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(i) through (iii) of this condition. If the permittee purchases motor vehicle scrap from a broker, the permittee must certify that all scrap received from that broker was obtained from other scrap providers who participate in a program for the removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(i) through (iii) of this condition. The National Vehicle Mercury Switch Recovery Program and the Vehicle Switch Recovery Program mandated by Maine State law are EPA-approved programs under paragraph (b) of this condition unless and until the Administrator disapproves the program (in part or in whole) under paragraph (b)(iii) of this condition.

(i) The program includes outreach that informs the dismantlers of the need for removal of mercury switches and provides training and guidance for removing mercury switches;

(ii) The program has a goal to remove at least 80 percent of mercury switches from the motor vehicle scrap the scrap provider processes. Although a program approved under paragraph (b) of this condition may require only the removal of convenience light switch mechanisms, the Administrator will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal; and

(iii) The program sponsor agrees to submit progress reports to the Administrator no less frequently than once every year that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at facilities with permits as required under the rules implementing subtitle C of RCRA (40 CFR parts 261 through 265 and 268). The progress reports must be based on a database that includes data for each program participant; however, data may be aggregated at the State level for progress reports that will be publicly available. The Administrator may change the approval status of a program or portion of a program (e.g., at the State level) following 90-days notice based on the progress reports or on other information.

(iv) The permittee must develop and maintain onsite a plan demonstrating the manner through which this facility is participating in the EPA-approved program.

(A) The plan must include facility-specific implementation elements, corporate-wide policies, and/or efforts coordinated by a trade association as appropriate for each facility.

(B) The permittee must provide in the plan documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the Technical Secretary, the permittee must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols.

(C) The permittee must conduct periodic inspections or provide other means of corroboration to ensure that scrap providers are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.

(c) *Option for specialty metal scrap.* The permittee must certify in the notification of compliance status that the only materials from motor vehicles in the scrap are materials recovered for their specialty alloy (including, but not limited to, chromium, nickel, molybdenum, or other alloys) content (such as certain exhaust systems) and, based on the nature of the scrap and purchase specifications, that the type of scrap is not reasonably expected to contain mercury switches.

(d) *Scrap that does not contain motor vehicle scrap.* For scrap not subject to the requirements in paragraphs (a) through (c) of this condition, the permittee must certify in the notification of compliance status and maintain records of documentation that this scrap does not contain motor vehicle scrap.

40 CFR §63.10685(b)

Compliance Method: Compliance with this requirement shall be demonstrated by complying with the SPPP and Supplement to the SPPP as outlined in **Attachments 2 and 3.**

E4-4. *Recordkeeping and reporting requirements.* In addition to the records required by §63.10, the permittee must keep records to demonstrate compliance with the requirements for the facility's pollution prevention plan in **Condition E4-2(a)** and/or for the use of only restricted scrap in **Condition E4-2(b)** and for mercury in **Condition E4-3(a) through (c)**, as applicable. The permittee must keep records documenting compliance with **Condition E4-3(d)** for scrap that does not contain motor vehicle scrap.

(a) If you are subject to the requirements for a site-specific plan for mercury under **Condition E4-3(a)**, you must:

(i) Maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, and an estimate of the percent of mercury switches recovered; and

(ii) Submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include a certification that the permittee has conducted inspections or taken other means of corroboration as required under **Condition E4-3(a)(ii)(C)**. You may include this information in the semiannual compliance reports required under paragraph (c) of this condition.

(b) If the permittee is subject to the option for approved mercury programs under **Condition E4-3(b)**, the permittee must maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If the permittee purchases motor vehicle scrap from a broker, the permittee must maintain records identifying each broker and documentation that all scrap provided by the broker was obtained from other scrap providers who participate in an approved mercury switch removal program.

(c) The permittee must submit semiannual compliance reports to the Technical Secretary for the control of contaminants from scrap according to the requirements in §63.10(e). The report must clearly identify any deviation from the requirements in **Conditions E4-2** and **E4-3** and the corrective action taken. The permittee must identify which compliance option in **Condition E4-3** applies to each scrap provider, contract, or shipment.

40 CFR §63.10685(c)

Compliance Method: Compliance with this requirement shall be demonstrated by complying with the SPPP and Supplement to the SPPP as outlined in **Attachments 2 and 3.**

E4-5. The permittee must install, operate, and maintain a capture system that collects the emissions from each EAF (including charging, melting, and tapping operations) and argon-oxygen decarburization (AOD) vessel and conveys the collected emissions to a control device for the removal of particulate matter (PM).

40 CFR §63.10686(a)

Compliance Method: Compliance with this requirement is assured by compliance with **Conditions E7-2 and E7-3**.

E4-6. Except as provided in **Condition E4-7**, the permittee must not discharge or cause the discharge into the atmosphere from an EAF or AOD vessel any gases which:

(1) Exit from a control device and contain in excess of 0.0052 grains of PM per dry standard cubic foot (gr/dscf); and

(2) Exit from a melt shop and, due solely to the operations of any affected EAF(s) or AOD vessel(s), exhibit 6% opacity or greater.

40 CFR §63.10686(b)

Compliance Method: Compliance with this requirement is assured by compliance with **Conditions E7-2, E7-3, and E7-11**.

E4-7. If a new or existing affected source has a production capacity of less than 150,000 tons per year (tpy) of stainless or specialty steel (as determined by the maximum production if specified in the source's operating permit or EAF capacity and maximum number of operating hours per year), the permittee must not discharge or cause the discharge into the atmosphere from an EAF or AOD vessel any gases which:

(1) Exit from a control device and contain particulate matter (PM) in excess of 0.8 pounds per ton (lb/ton) of steel. Alternatively, the owner or operator may elect to comply with a PM limit of 0.0052 grains per dry standard cubic foot (gr/dscf); and

(2) Exit from a melt shop and, due solely to the operations of any affected EAF(s) or AOD vessel(s), exhibit 6% opacity or greater.

40 CFR §63.10686(c)

Compliance Method: Compliance with this requirement is assured by compliance with **Conditions E7-2, E7-3, and E7-11.**

E4-8. Except as provided in paragraph (f) of this condition, the permittee must conduct performance tests to demonstrate initial compliance with the applicable emissions limit for each emissions source subject to an emissions limit in **Condition E4-6** or **Condition E4-7**.

(a) The permittee must conduct each PM performance test for an EAF or AOD vessel according to the procedures in §63.7 and 40 CFR §60.275a using the following test methods in 40 CFR part 60, appendices A-1, A-2, A-3, and A-4:
  (i) Method 1 or 1A of appendix A-1 of 40 CFR part 60 to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.
  (ii) Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A-1 of 40 CFR part 60 to determine the volumetric flow rate of the stack gas.
  (iii) Method 3, 3A, or 3B of appendix A-3 of 40 CFR part 60 to determine the dry molecular weight of the stack gas. You may use ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses" (incorporated by reference—see §63.14) as an alternative to EPA Method 3B.
  (iv) Method 4 of appendix A-3 of 40 CFR part 60 to determine the moisture content of the stack gas.
  (v) Method 5 or 5D of appendix A-3 of 40 CFR part 60 to determine the PM concentration. Three valid test runs are needed to comprise a PM performance test. For EAF, sample only when metal is being melted and refined. For AOD vessels, sample only when the operation(s) are being conducted.

(b) The permittee must conduct each opacity test for a melt shop according to the procedures in §63.6(h) and Method 9 of appendix A-4 of 40 CFR part 60. When emissions from any EAF or AOD vessel are combined with emissions from emission sources not subject to this subpart, the permittee must demonstrate compliance with the melt shop opacity limit based on emissions from only the emission sources subject to this subpart.

(c) During any performance test, the permittee must monitor and record the information specified in 40 CFR 60.274a(h) for all heats covered by the test.

(d) The permittee must notify and receive approval from the Administrator for procedures that will be used to determine compliance for an EAF or AOD vessel when emissions are combined with those from facilities not subject to this subpart.

(e) To determine compliance with the PM emissions limit in **Condition E4-7** for an EAF or AOD vessel in a lb/ton of steel format, compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of §63.10686.

(f) If an existing affected source is subject to the emissions limits in **Conditions E4-6** or **E4-7**, the permittee may certify initial compliance with the applicable emission limit for one or more emissions sources based on the results of a previous performance test for that emissions source in lieu of the requirement for an initial performance test provided that the test(s) were conducted within 5 years of the compliance date using the methods and procedures specified in paragraph (a) or (b) of this condition; the test(s) were for the affected facility; and the test(s) were representative of current or anticipated operating processes and conditions. Should the Technical Secretary deem the prior test data unacceptable to demonstrate compliance with an applicable emissions limit, the permittee must conduct an initial performance test within 180 days of the compliance date or within 90 days of receipt of the notification of disapproval of the prior test, whichever is later.

40 CFR §63.10686(d)

Compliance Method: Compliance with this requirement was demonstrated during the most recent performance test conducted on April 24 – 25, 2018. Subsequent testing shall be performed as specified in **Condition E7-10**.

E4-9. The permittee must monitor the capture system and PM control device required by Subpart YYYYY, maintain records, and submit reports according to the compliance assurance monitoring requirements in 40 CFR Part 64 – Compliance Assurance Monitoring. The exemption in 40 CFR §64.2(b)(1)(i) for emissions limitations or standards proposed after November 15, 1990 under section 111 or 112 of the CAA does not apply. In lieu of the deadlines for submittal in 40 CFR 64.5, the permittee must submit the monitoring information required by 40 CFR §64.4 to the Technical Secretary for approval by no later than the compliance date for the affected source under subpart YYYYY and operate according to the approved plan by no later than 180 days after the date of approval by the Technical Secretary.

40 CFR §63.10686(e)

Compliance Method: Compliance with this requirement is assured by operating in accordance with the Compliance Assurance Monitoring (CAM) Plan dated June 21, 2013, included as **Attachment 4** to this permit.

E4-10. The permittee must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) as provided in Table 1 to Subpart YYYYY of Part 60, included as **Attachment 5** to this permit.

40 CFR §63.10690(a)

E4-11. The notification of compliance status required by 40 CFR §63.9(h) must include each applicable certification of compliance, signed by a responsible official, in paragraphs (a) through (f) of this condition.

(a) For the pollution prevention plan requirements in **Condition E4-2(a)**: "This facility has submitted a pollution prevention plan for metallic scrap selection and inspection in accordance with §63.10685(a)(1)";
(b) For the restrictions on metallic scrap in **Condition E4-2(b)**: "This facility complies with the requirements for restricted metallic scrap in accordance with §63.10685(a)(2)";
(c) For the mercury requirements in **Condition E4-3**:
  (i) "This facility has prepared a site-specific plan for mercury switches in accordance with §63.10685(b)(1)";
  (ii) "This facility participates in and purchases motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the EPA Administrator in accordance with §63.10685(b)(2)" and has prepared a plan demonstrating how the facility participates in the EPA-approved program in accordance with §63.10685(b)(2)(iv);
  (iii) "The only materials from motor vehicles in the scrap charged to an electric arc furnace at this facility are materials recovered for their specialty alloy content in accordance with §63.10685(b)(3) which are not reasonably expected to contain mercury switches"; or
  (iv) "This facility complies with the requirements for scrap that does not contain motor vehicle scrap in accordance with §63.10685(b)(4)."
(d) This certification of compliance for the capture system requirements in **Condition E4-5**, signed by a responsible official: "This facility operates a capture system for each electric arc furnace and argon-oxygen decarburization vessel that conveys the collected emissions to a PM control device in accordance with §63.10686(a)".
(e) If applicable, this certification of compliance for the performance test requirements in **Condition E4-8(f)**: "This facility certifies initial compliance with the applicable emissions limit in §63.10686(a) or (b) based on the results of a previous performance test in accordance with §63.10686(d)(6)".
(f) This certification of compliance for the monitoring requirements in **Condition E4-9**, signed by a responsible official: "This facility has developed and submitted proposed monitoring information in accordance with 40 CFR part 64".

40 CFR §63.10690(b)

E5. New Source Performance Standards (NSPS) Requirements

E5-1. Electric arc furnaces (EAF) and dust-handling systems located in steel plants that produce carbon, alloy, or specialty steels are subject to 40 CFR 60, Subpart AA – *Standards of Performance for Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974, and On or Before August 17, 1983*. The provisions of Subpart AA apply to each furnace that produces molten steel and heats the charge materials with electric arcs from carbon electrodes and any equipment used to handle particulate matter collected by the control device and located at or near the control device or an affected EAF. The permittee shall comply with all applicable provisions of Subpart AA, which are incorporated into this permit pursuant to TAPCR 1200-03-09-.03(8).

E5-2. The permittee shall not discharge or cause the discharge into the atmosphere from an electric arc furnace any gases which:

a) Exit from a control device and exhibit 3% opacity or greater
b) Exit from a shop and, due solely to operations of any EAF(s), exhibit 6% opacity or greater except:
  (i) Shop opacity shall not exceed 20% during charging periods, and
  (ii) Shop opacity shall not exceed 20% during tapping periods.

The permittee shall not discharge or cause the discharge to the atmosphere from dust-handling equipment any gases which exhibit 10% opacity or greater.

40 CFR §60.272, TAPCR 1200-03-16-.26(3)(a), and the agreement letter dated October 22, 2019

Compliance Method: The permittee shall utilize the following procedures for opacity readings from both the EAF baghouses and shop areas during meltdown and refining periods:

a) Pursuant to §63.273(c), visible emission evaluations of baghouse opacity shall be conducted at least once per day for at least three 6-minute periods when the furnace is operating in the meltdown and refining period.
b) Pursuant to §63.273(d), visible emission evaluations of shop opacity shall be conducted at least once per day for at least one 6-minute period when the furnace is operating in the meltdown and refining period.
c) All visible emissions observations shall be conducted in accordance with EPA Method 9, as published in the current 40 CFR 60, Appendix A (6 minute average).
d) Visible emissions evaluations shall be conducted by a certified visible emission evaluator on forms prescribed by the Technical Secretary.
e) Visible emission evaluations shall be performed on at least ninety-three (93) percent of the EAF's operational days during each calendar quarter.
f) The permittee shall bear the responsibility of conducting the visible emission evaluations, except when Division personnel conduct readings.
g) Copies of all aforementioned records shall be submitted to the Technical Secretary semiannually. Reports shall be submitted within thirty (30) days of the end of each six-month period pursuant to 40 CFR §60.7. Reports shall be submitted to the Compliance Validation Section at the address specified in **Condition E2(d)**. Verification that these semiannual reports have been submitted shall be documented in each semiannual report submitted in accordance with **Condition E2(a)(1)**.
h) The highest opacity value shall be used when more than one opening exhibits opacity from the same cause.

Consistent with the requirements of Chapter 1200-03-20 and Rule 1200-03-05-.02, due allowance shall be made for visible emissions in excess of that allowed in this permit which are necessary or unavoidable due to routine startup and shutdown conditions.

For shop opacity during charging and tapping periods, the permittee shall be considered to meet the monitoring and related record keeping and reporting requirements of TAPCR 1200-03-09-.02(11)(e)1.(iii) and 1200-03-10-.02(2)(b)(1) and compliance requirements of TAPCR 1200-03-09-.02(11)(e)3.(i) through annual certification of compliance. The permittee shall submit annual compliance certifications for opacity during these periods.

E5-3. Pursuant to §60.274, the permittee shall maintain records daily of the following information for each EAF and associated dust handling system:

a) Time and duration of each charge;
b) Time and duration of each tap;
c) Flow data obtained by either:
   (i) checking and recording the control system's fan motor amperes and damper position once per shift, or
   (ii) installing a continuous monitoring device that records the volumetric flow rate through each separately ducted hood.

40 CFR §60.274(a)

Compliance Method: Compliance shall be assured by maintaining a log (**Log 1**, or a similar log that provides the same required information) of the time and duration of each charge, the time and duration of each tap, the fan's amperes (once per shift), and the damper positions (once per shift). This log must be retained for a period of not less than five years and be made available for inspection by the Technical Secretary or a Division representative.

LOG 1
DAILY MONITORING LOG

Emission Source Reference Number: _____

		Charge			Tap			Controls*	
Date	**Heat**	**Start Time**	**Stop Time**	**Total Time**	**Start Time**	**Stop Time**	**Total Time**	**Fan Amperes**	**Damper Position**

Notes: *Check and record the control system fan motor amperes and record damper positions once per shift.

E5-4. The permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., ductwork, dampers, and damper switches). This inspection shall include observations of the

physical appearance of the equipment (e.g., presence of hole in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be noted and proper maintenance performed.

40 CFR §60.274(e)

Compliance Method: Compliance shall be assured by maintaining a log (**Log 2**, or a similar log that provides the same required information) of monthly inspections. This log must be retained for a period of not less than five years and be made available for inspection by the Technical Secretary or a Division representative.

LOG 2
MONTHLY OPERATIONAL STATUS INSPECTION LOG

Emission Source Reference Number: _____

Month/ Year	Observations and Deficiencies			Maintenance Performed**
	Visual Inspection of ductwork and mechanical parts*	Dampers	Damper Switches	

Notes: * Physical appearance: presence of hole in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, fan erosion, etc.
** Note what maintenance was performed, by whom, and when.

57-0189-01	**Scrap Steel Shredder**	One (1) electrically powered scrap steel shredder with ferrous and non-ferrous separation (including four (4) non-ferrous separation hubs). Ferrous and non-ferrous metals as well as Auto Shredder Residue (ASR) are separated by various methods including magnetic separation. Emissions from the separation of ASR are controlled with a cyclone (SHRED1). Non-ferrous Separation System - Non-ferrous material handling and separation processes that receive shredded material from the outlet of the existing scrap shredder, direct non-ferrous materials to the new sorting hubs. The shredded metal infeed to the hubs will come from the existing steel scrap shredder or other steel scrap providers and an on-site landfill. The sorted product will initially be stored in piles of uniformly sized materials and then will either be used in the existing steel melting process or be shipped offsite to customers. Source includes four (4) stand-alone sorting hubs (Steps 10, 11, 12, 15) with conveyor belts, separators, and destoners to separate miscellaneous metals including ferrous materials, ICW (insulated copper wire), copper, Zurik (primarily stainless steel), Zorba (primarily Al) and non-ferrous microfines. A shared cyclone and baghouse system (BH1) controls particulate matter emissions from the destoners on Steps 11 and 15 (Sorting Hubs 11 and 15). This source is subject to 40 CFR 63, Subpart YYYYY

E6. Conditions E6-1 through E6-4 apply to source 57-0189-01

E6-1. a) The stated input capacity of the scrap steel shredder and associated material handling equipment is 400 tons per hour, on a daily average basis.

b) The stated input capacity of the non-ferrous material handling equipment, following the shredder but prior to the sorting hubs, is 80 tons per hour, on a monthly average basis.

c) The stated input capacities of the sorting hubs are as follows:
Sorting Hub Number 10: 40 tons per hour, on a monthly average basis
Sorting Hub Number 11: 25 tons per hour, on a monthly average basis
Sorting Hub Number 12: 45 tons per hour, on a monthly average basis
Sorting Hub Number 15: 10 tons per hour, on a monthly average basis

TAPCR 1200-03-09-.01(1)(d) and the application dated July 28, 2017

Compliance Method: The above input capacities are statements of design for the associated process equipment. If the permittee wishes to increase the stated input capacity of an emission unit, the permittee shall pursue the appropriate Title V procedure in accordance with 1200-03-09-.02(11) of the TAPCR. If a construction permit is applied for, this shall be done in accordance with 1200-03-09-.01(1) of the TAPCR.

E6-2. a) Particulate matter (PM) emitted from the scrap steel shredder and ferrous material handling/separation shall not exceed 25.0 pounds per hour, on a daily average basis, and 26.0 tons/year.

TAPCR 1200-03-07-.01(5), 1200-03-26-.02(9)(g)1.(i), and the request included in the application dated March 30, 2017

Compliance Method: This process shall not be operated without the use of the ASR cyclone control (SHRED1). Compliance with the hourly PM emission limitation shall be assured by maintenance of the control device. The cyclone shall be inspected weekly to see if there are any abrasion holes. Any abrasion holes shall be promptly repaired. All plugging problems shall be remedied promptly. Records of the weekly inspections shall be maintained onsite and made readily available for inspection by the Technical Secretary or a Division representative.

Compliance with the annual PM emission limit shall be demonstrated by calculating actual PM emissions from the scrap shredder and ferrous material handling/separation equipment on a monthly basis. Actual emissions shall be based on monthly operating hours and the maximum hourly emission rate. Operating hours shall be recorded as required by **Condition E6-3** and PM calculations shall be recorded in **Log 3**, required by **Condition E6-4**.

b) PM emitted from the non-ferrous material handling/separation and sorting hubs shall not exceed 3.26 pounds per hour, on a daily average basis, and 14.28 tons/year.

TAPCR 1200-03-07-.01(5) and the request included in the application dated March 30, 2017

Compliance Method: The destoners on Steps 11 and 15 (Sorting Hubs 11 and 15) shall not be operated without the use of the shared cyclone and baghouse control system. Compliance with the hourly PM emission limitation shall be assured by maintenance of the control device(s) and recordkeeping of operating parameters (pressure drop). The control device(s) shall be inspected weekly to see if there are any abrasion holes. Any abrasion holes shall be promptly repaired. All plugging problems shall be remedied promptly. Records of the weekly inspections shall be maintained onsite and made readily available for inspection by the Technical Secretary or a Division representative.

The permittee shall maintain a pressure drop across the destoner baghouse greater than or equal to 70 Pascals (as requested by the permittee in the letter submitted October 18, 2016). The pressure drop for the cyclone/baghouse system shall be recorded once daily when the source is in operation. Days when the source is not operating shall be noted. For lower pressure drop readings resulting from replacement of the baghouse filter(s), the permittee shall record the deviation as such in their daily records. Due allowance will be made for lower pressure drop readings which follow replacement of the baghouse filter provided the permittee establishes to the satisfaction of the Technical Secretary that these lower readings resulted from the replacement of the cartridge collector filter.

Compliance with the annual PM emission limit shall be demonstrated by calculating actual PM emissions from the non-ferrous material handling/separation and sorting hubs on a monthly basis. Actual emissions shall be based on monthly operating hours and the maximum hourly emission rate. Operating hours shall be recorded as required by **Condition E6-3** and PM calculations shall be recorded in **Log 3**, required by **Condition E6-4**.

E6-3. a) Total operating hours for the shredder and ferrous material handling/separation equipment shall not exceed 2,080 hours per year.

TAPCR 1200-03-26-.02(9)(g)1.(i)and the agreement letter dated October 22, 2019

Compliance Method: Compliance with this operating restriction shall be demonstrated through recordkeeping. The permittee shall record the hours of operation of the scrap shredder and associated ferrous material handling/separation equipment on a monthly basis. The operating hour information shall be recorded in **Log 3**, required by **Condition E6-4**.

b) There are no restrictions on hours of operation for the non-ferrous material handling/separation equipment and sorting hubs.

E6-4. The permittee shall record the operating hours of the scrap shredder and ferrous material handling/separation operations and the non-ferrous material handling operations and calculate actual emissions of PM from these operations on a monthly basis. This data shall be recorded in **Log 3**, or a similar log that provides the same information. For fee purposes, actual emissions shall be determined for each fee accounting period.

LOG 3
LOG OF PM EMISSIONS FOR COMPLIANCE AND FEE PURPOSES

Source: 57-0189-01

Month/Year	Hours of Operation of Shredder and Ferrous Material Handling/ Separation	Hours of Operation of Non-Ferrous Material Handling/Separation and Sorting Hubs	PM (lbs) (Shredder and Ferrous)	PM (lbs) (Non-Ferrous)	PM (lb) (Total)

Note: To calculate particulate emissions from the shredder, multiply the number of hours operated by 25.0 lbs/hour. To calculate the emissions from operation of the non-ferrous portion of the process operation, multiply the number of hours worked by 3.26 lbs/hour.

TAPCR 1200-03-10-.02(2) and 1200-03-26-.02(9)(g)1.(i)

57-0189-02 PSD	**One Electric Arc (EAF) Steel Melting Furnace with Continuous Caster, EAF Dust Silo and Lime Storage Silos with Baghouse Controls**	One Electric Arc Steel Melting Furnace (EAF) with Continuous Caster, EAF dust silo and lime storage with baghouse controls. The EAF has six (6) oxy-fuel burners with a total maximum rated heat capacity of 54,000,000 Btu per hour. The EAF uses a mixture of natural gas and oxygen as a supplemental fuel to the electric supply. The EAF particulate matter emissions are controlled by a direct evacuation control system and a canopy hood evacuation system. EAF dust is collected in a baghouse and stored in a silo, which has an additional baghouse. Lime storage silos are controlled by a baghouse**.** See the Compliance Assurance Monitoring (CAM) Plan included as Attachment 5. This source is subject to 40 CFR 60, Subpart AA and 40 CFR 63, Subpart YYYYY

E7. Conditions E7-1 through E7-12 apply to source 57-0189-02

E7-1. The maximum amount of steel produced by this source shall not exceed 135 tons per hour, based on a daily scheduled operating hour average, and 1,100,000 tons during all intervals of twelve consecutive months.

TAPCR 1200-03-09-.01(4) and PSD Construction Permit Number 955863P

Compliance Method: Compliance with these operating restrictions shall be demonstrated through recordkeeping. The permittee shall monitor the amount of steel produced and the operating hours of this source on a monthly basis. This information shall be recorded in **Logs 4 and 5** of **Condition E7-9**, as applicable.

E7-2. PM emitted from all control systems serving this source shall not exceed 0.0041 grains per dry standard cubic foot (39.3 pounds per hour, combined).

40 CFR §60.272 (a)(1)

Compliance Method: Compliance with this emission limitation is assured by compliance with **Conditions E7-10 and E7-11.**

E7-3. PM emissions from this source not passing through the control system shall not exceed 3.8 pounds per hour and 13.5 tons per all consecutive 12-month intervals**.**

TAPCR 1200-03-07-.01(5), the PSD Construction Permit Number 955863P, and the agreement letter dated October 22, 2019

Compliance Method: Compliance with the annual emission limit shall be demonstrated by calculating actual emissions of PM on a monthly basis and completing **Log 5** (**Condition E7-9**). Compliance with the hourly emission limit is assured by

compliance with **Conditions E7-10 and E7-11.** When **Conditions E7-10 and E7-11** are met, the following calculation demonstrates compliance with the hourly limit.

$$E_{PM,i} = (APR_i)x(1.4)x(1\text{-}98\%)$$

Where: $E_{PM,i}$: = Particulate emission rate during a particular production period (lb/hr);
APR_i: = Average actual production rate (steel produced) for the source during the production period (tons/hr);
i: = Individual production period (limited to 24 hours);
1.4: = Uncontrolled particulate emission factor for the operation, pounds of particulate per ton of steel produced as published in AP-42 Table 12.5-1, Section 12.5 Iron and Steel Production dated 10/86; and
98%: = Overall dust capture efficiency when both of the baghouses are functional, percent by weight.

E7-4. SO_2 emitted from this source shall not exceed 40.5 pounds per hour, on a monthly average basis.

TAPCR 1200-03-09-.01(4), 1200-03-14-.03(5), and PSD Construction Permit Number 955863P

Compliance Method: Compliance with this emission limit is assured by compliance with **Condition E7-1** and the emission factor of 0.3 lb/ton of steel produced (based on the performance test conducted April 24 – 25, 2018).

E7-5. VOC emitted from this source shall not exceed 44.5 pounds per hour, on a monthly average basis.

TAPCR 1200-03-09-.01(4), 1200-03-07-.07(2), and PSD Construction Permit Number 955863P

Compliance Method: Compliance with the hourly limit shall be assured by compliance with **Condition E7-1** and the emission factor of 0.33 lb/ton of steel produced (provided in the PSD application dated January 22, 2003, with additional information provided April 25, 2003).

E7-6. NO_x emitted from this source shall not exceed 72.9 pounds per hour, on a monthly average basis.

TAPCR 1200-03-09-.01(4), 1200-03-07-.07(2), and PSD Construction Permit Number 955863P

Compliance Method: Compliance with this emission limit is assured by compliance with **Condition E7-1** and the emission factor of 0.54 lb/ton of steel produced (based on the performance test conducted on April 24 – 25, 2018).

E7-7. CO emitted from this source shall not exceed 945 pounds per hour, on a monthly average basis.

TAPCR 1200-03-09-.01(4), 1200-03-07-.07(2), and PSD Construction Permit Number 955863P

Compliance Method: Compliance with this emission limit is assured by compliance with **Condition E7-1** and the emission factor of 7.0 lb/ton of steel produced (based on the performance test conducted on April 24 – 25, 2018).

E7-8. Lead (Pb) emitted from this source shall not exceed 1.12 pounds per hour, on a daily average basis.

TAPCR 1200-03-03-.03(1)

Compliance Method: Compliance with this emission limit is assured by compliance with **Condition E7-1, E7-2 and E7-3.** The permittee shall calculate average lead emissions on a monthly basis as required by **Condition E7-9**.

E7-9. For fee purposes, the permittee shall calculate actual emissions of SO_2, VOC, NO_X, PM, and lead for each fee accounting period. Emissions, as well as tons of steel produced and operating hours, shall be recorded in the following logs, or similar logs that provide the same required information.

TAPCR 1200-03-26-.02(9)(g)1.(i)

LOG 4
FEE EMISSION CALCUALTIONS

Source: 57-0189-02

Month/Year	Tons of Steel Produced	SO_2 (tons/ month)	SO_2 (tons/ 12 months)	VOC (tons/ month)	VOC (tons/12 months)	NOx (tons/ month)	NOx (tons/12 months)
July/Year							
June/Year							
Total							

The "tons/12 months" values are the sum of the pollutant emissions in the 11 months preceding the month just completed plus the pollutant emissions in the month just completed.

LOG 5[1]
LOG OF PARTICULATE AND LEAD EMISSIONS
FOR FEE PURPOSES AND FOR PM AMD LEAD COMPLIANCE

Source: 57-0189-02

Month/ Year	Steel Produced (tons/ month)	Steel Produced (tons/ 12 months)	PM not passing through the control system (tons/ month)[2]	PM not passing through the control system (tons/ 12 months)[3]	Total Hours of Operation	PM passing through the control device (tons/month)[4]	Total PM (tons/ month)	Lead (pounds/hour) Monthly average	Lead (tons/month)[5]
July/Year									
June/Year									
Total									

Notes:
[1] Only the column tons/12 month for Steel Produced and PM not passing through a control device shall be used for compliance purposes.
[2] Calculate emissions in tons/month using the equation: *EF x Material Input* where EF is 1.4×10^{-5} for fugitive emissions.
[3] The "tons/12 months" values are the sum of the pollutant emissions in the 11 months preceding the month just completed plus the pollutant emissions in the month just completed.
[4] Calculate emission in tons/month using the equation: *EF x Hours of Operation* where EF is 2.038×10^{-2}.
[5] Lead emissions are 2.6 percent of particulate, per the permit application. Fees for particulate matter emissions include lead emissions.

E7-10. The permittee shall conduct a performance test of the electric arc furnace (EAF) at a minimum frequency of once every five years. The permittee shall furnish the Technical Secretary with a written report of the results of an emissions performance test for the following pollutants:

Particulate matter
Sulfur dioxide
Nitrogen oxides
Carbon monoxide
Lead

The performance testing shall be conducted on the EAF control devices and data reduced in accordance with methods and procedures specified in 40 CFR 60, Appendix A.

The Technical Secretary shall be notified of the testing date at least 30 days prior to conducting the testing, so that an official observer may be present. At least 60 days prior to conducting the testing the source owner or operator shall submit a testing protocol to the Technical Secretary for approval. The test protocol must list the testing methodologies utilized and propose the process and control equipment parameters to be monitored during the testing.

TAPCR 1200-03-10-.04(2) and the PSD Applicability Analysis dated August 11, 2003, provided by the US EPA

E7-11. The EAF Baghouses associated with this emission source are subject to 40 CFR Part 64 for Compliance Assurance Monitoring (CAM) for PM emissions, and shall be monitored in accordance with the CAM Plan, included in **Attachment 4** to this permit.

Emission Units Subject to CAM Requirements

Emission Point Number	Emission Unit	Control Equipment	Applicable Pollutant	CAM Classification (Large/Small)

02	Electric ARC Furnace (EAF)	EAF Baghouses	PM	Large

This source also includes the EAF Dust silo and EAF Lime silo. Particulate emissions from each silo are controlled by a small baghouse. These small baghouses are not included in the CAM plan. These baghouses demonstrate compliance with the particulate emission limit by adhering to the maintenance plan specified below.

TAPCR 1200-03-09-.03(8)

Compliance Method: The two small baghouses mentioned above (less than 2000 cfm each) will be maintained, kept in good operating condition, and inspected semiannually to ensure compliance with the applicable particulate matter limits. Documentation of the semiannual inspections and any maintenance performed will be kept on site for a period of not less than five years.

E7-12. The exhaust gases from the baghouses controlling emissions from the EAF shall be discharged unobstructed vertically upwards to the ambient air from a stack not less than 75 feet above ground level.

TAPCR 1200-03-22-.04(3)

Compliance Method: This is a statement of the parameters utilized in the Lead Ambient Impact Modeling Assessment performed by the Division and dated October 10, 2019. The permittee must notify the Technical Secretary at least 30 days before changing any of these parameters.

57-0189-03	**Nine Preheaters**	Nine preheaters with a total maximum heat input capacity of 48,000,000 BTU per hour, using natural gas as fuel. Fuel burning sources include three (3) ladle preheaters with low NOx burners, 10 MMBtu/hour each; two (2) tundish preheaters, 4.4 MMBtu/hour each; one ladle dryout heater, 6.2 MMBtu/hour; and one ladle cover dryout heater, one tundish dryout preheater, and one tapping spout dryout preheater, 1 MMBtu/hour each.

E8. Conditions E8-1 through E8-6 apply to source 57-0189-03

E8-1. Natural gas only shall be used as fuel for this source.

TAPCR 1200-03-09-.01(1)(d) [Permit Number 743814P]

Compliance Method: This is a statement of design for the associated heaters. If the permittee wishes to change the stated fuel usage of an emission unit, the permittee shall pursue the appropriate Title V procedure in accordance with 1200-03-09-.02(11) of the TAPCR. If a construction permit is applied for, this shall be done in accordance with 1200-03-09-.01(1) of the TAPCR.

E8-2. Maximum rated heat input for this source shall not exceed 48,000,000 Btu per hour.

TAPCR 1200-03-09-.01(1)(d) [Permit Number 953572P]

Compliance Method: This is a statement of design for the associated heaters. If the permittee wishes to increase the stated heat input capacity of an emission unit, the permittee shall pursue the appropriate Title V procedure in accordance with 1200-03-09-.02(11) of the TAPCR. If a construction permit is applied for, this shall be done in accordance with 1200-03-09-.01(1) of the TAPCR.

E8-3. PM emitted from this source shall not exceed 0.001 grains per dry standard cubic foot (1.9 pounds per hour) and 8.4 tons/yr.

TAPCR 1200-03-06-.01(7) and information contained in agreement letter dated February 28, 1996 from permittee.

Compliance Method: Compliance with these emission limitations is assured by compliance with **Conditions E8-1 and E8-2**, and the emission factor of 1.9 pounds per million cubic feet for PM as published in AP-42 Table 1.4-2 (dated 3/98).

E8-4. SO_2 emitted from this source shall not exceed 0.1 pounds per hour and 0.44 tons/year.

TAPCR 1200-03-14-.03(5)

Compliance Method: Compliance with these emission limitations shall be assured by compliance with **Conditions E8-1 and E8-2** and the emission factor of 0.6 pounds per million cubic feet for SO_2 as published in AP-42 Table 1.4-2 (dated 3/98).

E8-5. VOC emitted from this source shall not exceed 0.26 pounds per hour and 1.2 tons/year.

TAPCR 1200-03-06-.03(2)

Compliance Method: Compliance with these emission limitations shall be assured by compliance with **Conditions E8-1 and E8-2** and the emission factor of 5.5 pounds per million cubic feet for VOC as published in AP-42 Table 1.4-2(dated 3/98).

E8-6. NO_x emitted from this source shall not exceed 4.70 pounds per hour and 20.6 tons/year.

TAPCR 1200-03-06-.03(2)

Compliance Method: Compliance with these emission limitations shall be assured by compliance with **Conditions E8-1 and E8-2** and the emission factor of 100 pounds per million cubic feet for NO_X as published in AP-42 Table 1.4-1 (dated 3/98).

E8-7. CO emitted from this source shall not exceed 3.95 pounds per hour 17.3 tons/year.

TAPCR 1200-03-06-.03(2)

Compliance Method: Compliance with these emission limitations shall be assured by compliance with **Conditions E8-1 and E8-2** and the emission factor of 84 pounds per million cubic feet for CO in AP-42 Table 1.4-1 (dated 3/98).

E8-8. Visible emissions from this source shall not exhibit greater than 10% opacity, except for one six-minute period in any one hour period, and for no more than four six-minute periods in any 24 hour period. Visible emissions shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (6 minute average).

TAPCR 1200-03-05-.01(3) and the agreement letter dated October 22, 2019

Compliance Method: The permittee shall assure compliance with the opacity limitation by utilizing the Division's opacity matrix dated June 18, 1996 and amended September 11, 2013 for EPA Method 9 that is enclosed as **Attachment 1**.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

57-0189-04	**Reheat Furnace**	The reheat furnace, used to heat billets to rolling temperature, has a maximum rated heat input capacity of 144,000,000 Btu per hour. Natural gas is the primary fuel and No.2 fuel oil is used as backup fuel.

E9. Conditions E9-1 through E9-10 apply to source 57-0189-04

E9-1. Natural gas and No.2 fuel oil shall be used as fuels for this source. No. 2 fuel oil usage for this source shall not exceed 1,000,000 gallons during any period of 12 consecutive months.

1200-03-09-.01(4) and the agreement letter dated October 22, 2019. The fuel oil usage limit was requested to avoid PSD applicability.

Compliance Method: Compliance with this operational restriction shall be demonstrated through recordkeeping. The permittee shall monitor and record the amount of fuel used in the reheat furnace on a monthly basis. This information shall be recorded in **Log 6**, as required by **Condition E9-10**.

E9-2. The maximum rated heat input capacity of this source is 144 MMBtu per hour.

TAPCR 1200-03-09-.01(1)(d) [Permit 951479P]

Compliance Method: This is a statement of design for the reheat furnace. If the permittee wishes to increase the stated heat input capacity of the furnace, the permittee shall pursue the appropriate Title V procedure in accordance with 1200-03-09-.02(11) of the TAPCR. If a construction permit is applied for, this shall be done in accordance with 1200-03-09-.01(1) of the TAPCR.

E9-3. The sulfur content of the No. 2 fuel oil shall not exceed 0.5% by weight.

TAPCR 1200-03-14-.01(3) and the agreement letter dated October 22, 2019

Compliance Method: Certification from the fuel supplier of the sulfur content (by weight) for each shipment of fuel oil must be maintained at the source location and kept available for inspection by the Technical Secretary or a Division representative. Alternatively, the vendor may provide a statement to the effect that all shipments of fuel oil shall not exceed 0.5 percent sulfur by weight. All records shall be kept for a period of not less than five years.

E9-4. PM emitted from this source shall not exceed 2.6 pounds per hour.

TAPCR 1200-03-07-.01(5) and the agreement letter dated October 22, 2019

Compliance Method: Compliance with this emission limitation shall be assured by compliance with **Conditions E9-1 and E9-2** and the emission factor of 1.9 pounds of PM per million cubic feet as provided in AP-42 Table 1.4-2 (dated 7/98) for natural gas combustion, or 2.0 pounds of PM per 1,000 gallons as provided in AP-42 Table 1.3-1 (dated 5/10) for No. 2 fuel oil combustion.

E9-5. SO_2 emitted from this source shall not exceed 73.0 pounds per hour.

TAPCR 1200-03-14-.03(5), 1200-03-09-.01(4), and the agreement letter dated October 22, 2019.

Compliance Method: Compliance with this emission limitation is assured by compliance with **Conditions E9-1, E9-2, and E9-3** and the emission factor of 0.6 pounds of SO_2 per million cubic feet as published in AP-42 Table 1.4-2 (dated 7/98) for natural gas combustion, or 142S (where S is the percent sulfur) pounds SO_2 per 1,000 gallons as published in AP-42 Table 1.3-1(dated 5/10) for fuel oil combustion.

E9-6. VOC emitted from this source shall not exceed 2.0 pounds per hour.

TAPCR 1200-03-06-.03(2)

Compliance Method: Compliance with this emission limitation shall be assured by compliance with **Conditions E9-1 and E9-2** and the emission factor of 5.5 pounds of VOC per million cubic feet as published in AP-42 Table 1.4-2 (dated 3/98)for natural gas combustion or 0.2 pounds of VOC per 1,000 gallons as published in AP-42 Table 1.3-3 (dated 5/10) for fuel oil combustion.

E9-7. NO_x emitted from this source shall not exceed 60.0 pounds per hour.

TAPCR 1200-03-06-.03(2)

Compliance Method: Compliance with this emission limitation shall be assured by compliance with **Conditions E9-1 and E9-2** and the emission factor of 400 pounds NO_X per million standard cubic feet of natural gas as provided in the letter dated October 22, 2019 from the permittee. This emission factor is higher than the factor provided for natural gas combustion as listed in AP-42 Section 1.4 (dated 3/98) or for fuel oil combustion as listed in AP-42 Section 1.3 (dated 05/10).

E9-8. CO emitted from this source shall not exceed 12.1 pounds per hour.

TAPCR 1200-03-06-.03(2)

Compliance Method: Compliance with this emission limitation shall be assured by compliance with **Conditions E9-1 and E9-2** and the emission factor of 84 pounds of CO per million cubic feet as published in AP-42 Table 1.4-1 (dated 3/98) for natural gas combustion or 5.0 pounds of CO per 1,000 gallons as published in AP-42 Table 1.3-1 (dated 05/10) for fuel oil combustion.

E9-9. Visible emissions from this source shall not exhibit greater than ten percent (10%) percent opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (6 minute average).

TAPCR 1200-03-05-.01(3) and the agreement letter dated October 22, 2019

Compliance Method: The permittee shall assure compliance with the opacity limitation by utilizing the Division's opacity matrix dated June 18, 1996 and amended September 11, 2013 for EPA Method 9 that is enclosed as **Attachment** 1.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

E9-10. The permittee shall monitor and record the amount of fuel combusted in the reheat furnace on a monthly basis. For fee purposes, the permittee shall calculate actual emissions of PM, SO_2, NO_X, and VOC during each fee accounting period. Records of monthly fuel use and actual emissions shall be recorded in Log 6, or a similar log that provides the same required information.

TAPCR 1200-03-09-.01(4), 1200-03-10-.02(2)(a), and TAPCR 1200-03-26-.02(9)(g)1.(i)

LOG 6
LOG OF FUEL USE FOR SOURCE 04 AND ACTUAL EMISSIONS FOR COMPLIANCE DEMONSTRATION AND FEE PURPOSES

Month/Year	Fuel Usage			Emissions			
	Natural Gas (million ft^3)	Fuel Oil (1000 gals)	Sulfur Content of Fuel Oil in Percent	PM (lbs)	SO_2 (lbs)	VOC (lbs)	NO_x (lbs)
July/Year							
June/Year							
12 Month Total							
12 Month Total (tons)							

57-0189-05	**Product Straightener Process with Baghouse Control**	This product straightener process includes sixteen (16) Mill Stands and a Baghouse (BSBH1) for control of PM emissions. This product straightener is electrically powered.

E10. Conditions E10-1 through E10-3 apply to source 57-0189-05

E10-1. The stated material input rate of this process is 250,000 pounds per hour, on a daily average basis.

TAPCR 1200-03-09-.01(1)(d)

Compliance Method: The above material input rate is a statement of design for the associated operation. If the permittee wishes to change the stated input rate of an emission unit, the permittee shall pursue the appropriate Title V procedure in accordance with 1200-03-09-.02(11) of the TAPCR. If a construction permit is applied for, this shall be done in accordance with 1200-03-09-.01(1) of the TAPCR

E10-2. PM emitted from this process shall not exceed 2.15 pounds per hour.

TAPCR 1200-03-07-.01(5) and the agreement letter dated October 30, 1985

Compliance Method: Compliance with this emission limitation shall be assured by maintaining a pressure drop across the baghouse greater than or equal to 1.0 inch of water. The permittee shall monitor and record the pressure drop across the baghouse once daily when the source is in operation. The pressure drop shall be recorded in **Log 7** below (or a similar log that provides the same required information). Days when the source does not operate shall be noted. Reports and certifications shall be submitted in accordance with **Condition E2** of this permit.

LOG 7
PRODUCT STRAIGHTENER BAGHOUSE PRESSURE DROP (ΔP) FOR SOURCE 05
Month _____Year _____

Date	ΔP in H_2O
1	
2	
Etc.	

E10-3. For fee purposes, actual emissions from this source shall be determined for each fee accounting period by completing **Log 8**.

TAPCR 1200-03-26-.02(9)(g)1.(i)

LOG 8
LOG OF POLLUTANT EMISSION TONNAGE FOR SOURCE 03 FOR FEE PURPOSES

Month/Year	Hours of Operation	PM (lbs)
July/Year		
June/Year		
12 Month Total (lbs)		
12 Month Total (tons)		

Note: To calculate particulate emission multiply the number of hours operated by 2.15 lbs/hour

57-0189-10	**Auto Shredder Residue (ASR) Dryer with Baghouse**	This scrap steel processing operation includes a 34 MMBtu/hour Heat Input and ASR Material Handling equipment (Conveyors and storage locations)

E11(SM1).	Conditions E11-1 through E11-9 apply to source 57-0189-10

E11-1(SM1). The stated design input capacity of the Auto Shredder Residue (ASR) Dryer is 50 tons per hour, on a monthly average basis.

TAPCR 1200-03-09-.03(8)

Compliance Method: This condition is a statement of the design input capacity for this source. If the permittee wishes to increase the design input maximum capacity of this source, the permittee shall pursue the appropriate Title V procedure in accordance with 1200-03-09-.02(11) of the TAPCR. If a construction permit is applied for, this shall be done in accordance with 1200-03-09-.01 of the TAPCR.

E11-2(SM1). The stated heat input capacity of the ASR dryer is 34 MMBtu/hour, on a monthly average basis.

TAPCR 1200-03-09-.03(8)

Compliance Method: This condition is a statement of the design heat input capacity for this source. If the permittee wishes to increase the design input maximum capacity of this source, the permittee shall pursue the appropriate Title V procedure in accordance with 1200-03-09-.02(11) of the Tenn. Comp. R. & Regs. If a construction permit is applied for, this shall be done in accordance with 1200-03-09-.01 of the Tenn. Comp. R. & Regs.

E11-3(SM1). Only natural gas shall be used as fuel for the ASR Dryer.

TAPCR 1200-03-09-.03(8)

Compliance Method: This condition is a statement of design for this source. If the permittee wishes to change or modify the fuel used by this source, the permittee shall pursue the appropriate Title V procedure in accordance with 1200-03-09-.02(11) of the TAPCR. If a construction permit is applied for, this shall be done in accordance with 1200-03-09-.01 of the TAPCR.

E11-4(SM1). Particulate matter (PM) emitted from the ASR Dryer shall not exceed 1.3 pounds per hour, on a daily average basis (controlled by baghouse). The total annual PM emissions, including fugitive dust from the associated material handling operations (conveyors and storage piles), shall not exceed 12.8 tons during any period of 12 consecutive months.

TAPCR. 1200-03-07-.01(5), 1200-03-09-.03(8)

Compliance Method: The permittee shall install, operate, and maintain a baghouse to control particulate matter emissions. The source controlled by the baghouse shall not operate unless the control device is installed and operated. The permittee shall monitor the baghouse control device for this source as follows:

(1) Assure continued compliance by maintaining the "approved" minimum pressure drop of 0.5 inches of water column across each baghouse (unless notified by the Division that an alternate pressure drop must be used), by recording one pressure drop reading per day while the source is in operation; conducting and recording weekly visual inspections of the exterior of the baghouse and the baghouse ductwork, including the baghouse exhaust; and maintaining the logs (see example below). If the permittee finds that a sub-minimum pressure drop, abrasion hole, emissions problem, or plugging problem has developed during an inspection of the baghouse(s), the permittee shall initiate corrective action within 24 hours and complete corrective action as expediently as practical. The permittee shall record all weekly inspections and corrective action taken including the initiation and completion of all corrective actions in the log.

(2) For lower pressure drop readings resulting from replacement of bags, the permittee shall record the deviations in the log. Due allowance will be made for lower pressure drop readings which follow replacement of bags provided the permittee establishes to the satisfaction of the Technical Secretary that these lower readings resulted from the replacement of bags.

(3) In summary, the log shall include the initials of the person performing the pressure drop reading and inspection, any corrective action(s)/deviation(s), along with the date, time, and any relevant comments. Days that the source is not in operation shall be noted. These records shall be retained in accordance with **Condition E3-6**.

LOG 9
ASR BAGHOUSE PRESSURE DROP (ΔP) FOR SOURCE 10
Month _____Year _____

Date	ΔP in H_2O
1	
2	
3	
Etc.	

E11-5(SM1). Sulfur dioxide (SO_2) emitted from the ASR Dryer shall not exceed 0.06 pounds per hour and 0.26 tons during any period of 12 consecutive months.

TAPCR. 1200-03-14-.03(5)

Compliance Method: Compliance with this limit is assured by compliance with **Conditions E11-2(SM1)** and **E11-3(SM1)**.

E11-6(SM1). Nitrogen Oxides (NOx) emitted from the ASR Dryer shall not exceed 7.9 tons during any period of 12 consecutive months.

TAPCR. 1200-03-07-.07(2)

Compliance Method: Compliance with this limit is assured by compliance with **Conditions E11-2(SM1)** and **E11-3(SM1)**.

E11-7(SM1). Carbon Monoxide (CO) emitted from the ASR Dryer shall not exceed 8.32 tons during any period of 12 consecutive months.

TAPCR. 1200-03-07-.07(2)

Compliance Method: Compliance with this limit is assured by compliance with **Conditions E11-2(SM1)** and **E11-3(SM1)**.

E11-8(SM1). Volatile Organic Compounds (VOC) emitted from the ASR Dryer shall not exceed 0.82 tons during any period of 12 consecutive months.

TAPCR. 1200-03-07-.07(2)

Compliance Method: Compliance with this limit is assured by compliance with **Conditions E11-2(SM1)** and **E11-3(SM1)**.

E11-9(SM1). The ASR Dryer will be located at an electric arc furnace steelmaking facility that is an area source of hazardous air pollutants (HAP). As such, the ASR Dryer is subject to the requirements of 40 CFR Part 63 Subpart YYYYY-National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities. Specifically, the ASR Dryer is subject to the requirements of §63.10685(a), (b) and (c) for the control of contaminants from scrap. The applicable requirements of Subpart YYYYY are included as Attachment #5. A copy of the facility's current Scrap Pollution Prevention Plan (dated May 18, 2015), as required by Subpart YYYYY, is included as Attachment #3.

40 CFR §63.10685(a) - (c) and TAPCR. 1200-03-09-.03(8)

57-0189-11	**Post Processing Heating Operation for Steel bars**	This post processing operation has a heat input of 21.6 MMBtu/hour (Natural Gas fired)

E12(SM2).	Conditions E12-1 through E12-8 apply to source 57-0189-11

E12-1(SM2). The design heat input rate of the Post Processing Heating Operation (for Steel Bars) is 21.6 MMBTU/hr. Should the permittee need to modify the Post Processing Heating Operation in a manner that increases the design heat input rate, a Title V modification shall be applied for and received in accordance with TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

TAPCR 1200-03-09-.03(8)

Compliance Method: The permittee shall maintain documentation to demonstrate the heat input capacity for the Post Processing Heating Operation. Documentation shall include, but is not limited to, manufacturer's specifications, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

E12-2(SM2). Only natural gas shall be used as fuel(s) for the Post Processing Heating Operation. The Post Processing Heating Operation is only capable of burning this fuel(s). Should the permittee need to modify the Post Processing Heating Operation to allow the use of a fuel other than natural gas, a Title V modification shall first be applied for and received in accordance with TAPCR 1200-03-09-.01 TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

TAPCR 1200-03-09-.03(8)

Compliance Method: The permittee shall maintain documentation to demonstrate the type(s) of fuel used by the Post Processing Heating Operation. Documentation shall include, but is not limited to, manufacturer's specifications, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

E12-3(SM2). The Post Processing Heating Operation shall not operate more than 4,700 hours over any consecutive 12-month period.

TAPCR 1200-03-07-.01(5) and the agreement letter dated August 3, 2021.

Compliance Method: The permittee shall record the actual operating hours of the Post Processing Heating Operation on a daily basis in a log in the format below (see example) or in an alternative format which provides the same information. The log shall be retained in accordance with **Condition E3-6**.

Log 10
Hours of Operation, daily basis Source #11
(this is Log 15 according to internal Gerdau Log Numbering System)

Month:_____ Year:_____

Date	Hours of Operation	Date	Hours of Operation
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	

9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16			
Total Hours per Month			

Log 11
Hours of Operation, 12-Consecutive Month Total Source #11
(this is Log 16 according to internal Gerdau Log Numbering System)

Month and Year	Hours of Operation for Month	Previous 11 month Total	12-Consecutive Month Total

Note: The tons per 12-consecutive month values are the sum of the 'description' (hours) in the 11 months preceding the month just completed + the 'description' in the month just completed. If data is not available for the 11 months preceding the initial use of the table, this value will be equal to the value for tons per month. For the second month, it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed [i.e., 6 (2) represents 6 tons emitted in 2 months].

E12-4(SM2). Particulate matter (PM) emitted from this source shall not exceed 0.16 pounds per hour, daily average basis.

TAPCR 1200-03-07-.01(5) and the agreement letter dated August 3, 2021.

Compliance Method: Compliance with this emission limitation is assured by compliance with Conditions **E12-1(SM2)** (design heat input rate), **E12-2(SM2)** (fuel type) and the emission factor of 7.6 lbs. PM/MMSCF natural gas combusted from AP-42, Chapter 1.4 Natural Gas Combustion, table number 1.4-2

E12-5(SM2). Sulfur dioxide (SO_2) emitted from this source shall not exceed 0.02 pounds per hour on a daily average basis.

TAPCR 1200-03-14-.03(5)

Compliance Method: Compliance with this emission limitation is assured by compliance with Conditions **E12-1(SM2)** (design heat input rate), **E12-2(SM2)** (fuel type) and the emission factor of 0.6 lbs. SO_2/MMSCF natural gas combusted from AP-42, Chapter 1.4 Natural Gas Combustion, table number 1.4-2

E12-6(SM2). Carbon Monoxide (CO) emitted from this source shall not exceed 4.18 tons per any consecutive 12-month period.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation is assured by compliance with Conditions **E12-1(SM2)** (design heat input rate), **E12-2(SM2)** (fuel type) and the emission factor of 84 lbs. CO/MMSCF natural gas combusted from AP-42, Chapter 1.4 Natural Gas Combustion, table number 1.4-1, and the 4,700 hour per year Operating Hours Limitation specified at **Condition E12-3(SM2)**.

E12-7(SM2). Volatile Organic Compounds (VOC) emitted from this source shall not exceed 0.28 tons per any consecutive 12-month period.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation is assured by compliance with Conditions **E12-1(SM2)** (design heat input rate), **E12-2(SM2)** (fuel type) and the emission factor of 5.5 lbs. VOC/MMSCF natural gas combusted from AP-42, Chapter 1.4 Natural Gas Combustion, table number 1.4-2, and the 4,700 hour per year Operating Hours Limitation specified at **Condition E12-3(SM2)**.

E12-8(SM2). Nitrogen oxides (NO_X) emitted from this source shall not exceed 2.12 pounds per hour and 4.98 tons per any consecutive 12-month period.

TAPCR 1200-03-07-.07(2) and the agreement letters dated August 3, 2021, and October 15, 2021.

Compliance Method: Compliance with this emission limitation is assured by compliance with Conditions **E12-1(SM2)** (design heat input rate), **E12-2(SM2)** (fuel type) and the emission factor of 100 lbs. NOx/MMSCF natural gas combusted from AP-42, Chapter 1.4 Natural Gas Combustion, table number 1.4-1. Compliance with the 12-month emission limit is also based on the 4,700 hour per year Operating Hours Limitation specified at **Condition E12-3(SM2)**, and the agreement letters dated August 3, 2021, and October 15, 2021.

END OF SIGNIFICANT MODIFICATION #2 to PERMIT NUMBER 574449

ATTACHMENT 1

OPACITY MATRIX DECISION TREE for
VISIBLE EMISSION EVALUATION METHOD 9
Dated June 18, 1996, and amended September 11, 2013

Decision Tree PM for Opacity for Sources Utilizing EPA Method 9*

Notes:

PM = Periodic Monitoring required by 1200-03-09-.02(11)(e)(iii).

This Decision Tree outlines the criteria by which major sources can meet the periodic monitoring and testing requirements of Title V for demonstrating compliance with the visible emission standards set forth in the permit. It is not intended to determine compliance requirements for EPA's Compliance Assurance Monitoring (CAM) Rule (formerly referred to as Enhanced Monitoring – Proposed 40 CFR 64).

Examine each emission unit using this Decision Tree to determine the PM required.*

Use of continuous emission monitoring systems eliminates the need to do any additional periodic monitoring.

Visible Emission Evaluations (VEEs) are to be conducted utilizing EPA Method 9. The observer must be properly certified to conduct valid evaluations.

Typical Pollutants
Particulates, VOC, CO, SO_2, NO_x, HCl, HF, HBr, Ammonia, and Methane.

Initial observations are to be repeated within 90 days of startup of a modified source, if a new construction permit is issued for modification of the source.

A VEE conducted by TAPCD personnel after the Title V permit is issued will also constitute an initial reading.

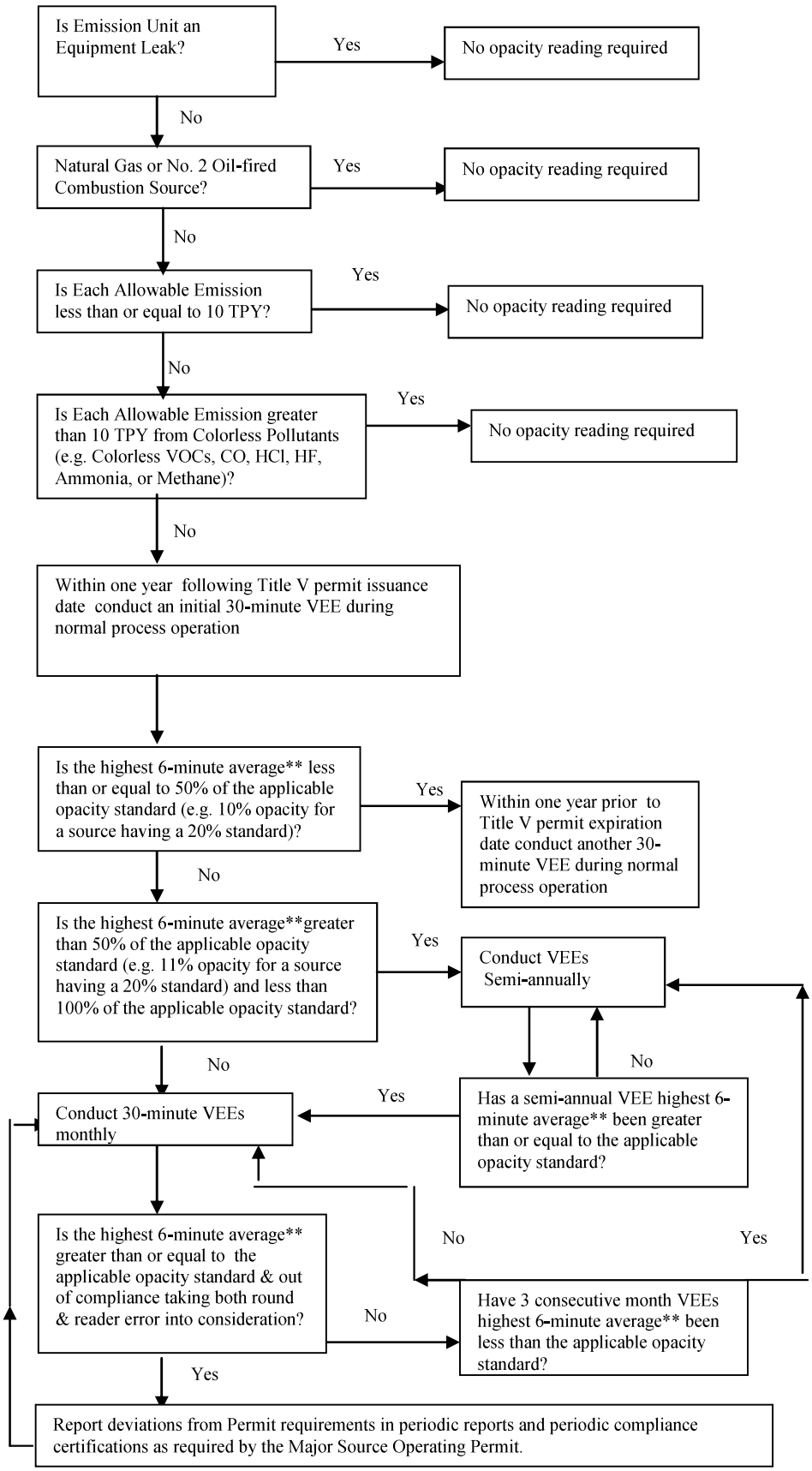
Reader Error
EPA Method 9, Non-NSPS or NESHAPS stipulated opacity standards:
The TAPCD guidance is to declares non-compliance when the highest six-minute average** exceeds the standard plus 6.8% opacity (e.g. 26.8% for a 20% standard).

EPA Method 9, NSPS or NESHAPS stipulate opacity standards:
EPA guidance is to allow only engineering round. No allowance for reader error is given.

*Not applicable to Asbestos manufacturing subject to 40 CFR 61.142

**Or second highest six-minute average, if the source has an exemption period stipulated in either the regulations or in the permit.

Dated June 18, 1996
Amended September 11, 2013



ATTACHMENT 2

SCRAP POLLUTION PREVENTION PLAN (SPPP) PLAN
Dated September 18, 2013

GERDAU

57-0189

September 18, 2013

Tennessee Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, Tennessee 37243-1531
Attn: Manir Ahmed

Dear Manir;

Please find enclosed the Scrap Pollution Prevention Plan as required by 40 CFR YYYYY regarding scrap processing and Electric Arc Furnaces (EAF). If you have any questions or comments please call me at 731-423-5274.

Sincerely,

Will Ownby

Will Ownby
Environmental Manager
Gerdau
Jackson Tennessee Steel Mill

Certified Mail – 7010 3090 0001 2421 2631

2013 SEP 24 AM 10:29

PO Box 10848, Jackson, TN • 38308 • Phone: (731) 424-5600 • Fax: (731) 422-4247 • www.gerdau.com

September 18, 2013

Pollution Prevention Plan for the Control of Contaminants in Scrap Under the Area Source Rule for Electric Arc Furnace (EAF) Steelmaking Facilities

Contaminants such as chlorinated plastics, free organic liquids, lead (except for leaded steel) and mercury are not appropriate or desired for the production of steel in EAF facilities. However, these contaminants are found in the scrap metal that is the basic feedstock for the production of new steel.

EPA has identified EAF facilities as potential sources of HAP emissions and, on December 28, 2007, promulgated final regulations (codified at 40 CFR Part YYYYY) intended to control or minimize such emissions.

The regulations require EAF facilities, among other things, to restrict the use of certain scrap or follow a pollution prevention plan (PPP) for scrap purchased as production feedstock to minimize the amount of specified contaminants in such scrap.

Gerdau Jackson TN Mill is committed to complying with the requirements of the EAF Area Source Rule and to the goal of removing at least 80% of mercury convenience-light switches from motor vehicle scrap. Gerdau Jackson TN Mill is also committed to minimizing to the extent practicable the presence of other contaminants in scrap that may result in the emission of hazardous air pollutants (HAP).

Accordingly, Gerdau Jackson TN Mill has adopted and will comply with the provisions of this PPP designed to control the presence of such contaminants in scrap that is consumed in the EAF by adopting:

1. A specification for scrap that addresses contaminants identified by EPA
2. Procedures for verifying compliance with the specification
3. Procedures for taking corrective action against vendors who do not comply with the specification
4. Program policies, implementation elements, and training and outreach materials sufficient to demonstrate how Gerdau Jackson TN Mill will appropriately implement its responsibilities under the EPA-approved National Vehicle Mercury Switch Recovery Program (NVMSRP) or other EPA-approved program.

This PPP must be approved by USEPA or a delegated authority. Any deficiencies identified by the permitting authority must be addressed within 60 days of disapproval of the

PPP. A copy of the plan and supportive documentation must remain onsite for a period of three years.

The terms used in this Pollution Prevention Plan and in the outreach materials attached and incorporating to the PPP shall have the same definitions as those enumerated in EPA's Final Area Source Rule found at 40 CFR Part 63 Subpart YYYYY. As outlined in the final rule, the term "mercury switch" denotes only mercury switches that are part of a convenience light switch mechanism installed in a vehicle.

I. General Scrap Specifications:

The following restrictions apply to all scrap steel purchased or used by Gerdau Jackson TN Mill in its EAF steelmaking process:

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 in the furnace unless the scrap is used to produce leaded steel.

C. Scrap must be purchased from providers that have minimized the presence of mercury in scrap through participation in the NVMSRP or another EPA-approved program.

II. Verification of Compliance with Specifications

A. Free Organic Liquids, Chlorinated Plastics, Lead and Lead-Containing Components:

1. Visual Inspection: Gerdau Jackson TN Mill facility conducts a visual inspection of incoming scrap loads to ensure that the scrap meets existing quality and/or purchase order specifications for grade, type, density, and content. Scrap inspection will be required also to determine whether there is an obvious presence of free organic liquids, chlorinated plastics, or lead-containing components. Records of scrap inspections will be maintained on site for one year. Scrap inspection records shall include the identity of the scrap provider for any load that fails visual inspection. Foreign materials will be removed to the extent practicable prior to charging to the furnace, and the scrap supplier will be subject to corrective action.

2. Inspection for Free Organic Liquids: Turnings, borings, and other forms of scrap that were generated as a result of the processing of metal with use of cutting, lubricating or cooling fluids will be visually inspected prior to charging to the furnace to ensure that such scrap does not contain free organic liquids.

3. Depletion of Lead and Chlorinated Plastics from Shredded Scrap: Scrap that has been processed through a shredder that utilizes magnetic or density separation techniques to separate ferrous and non ferrous materials will be presumed to be depleted scrap of chlorinated plastics and lead to the extent practicable.

4. Inspections: Gerdau Jackson TN Mill shall identify any scrap provider whose scrap (except as described in Paragraph 5 below) is not subject to inspection pursuant to this plan. Gerdau Jackson TN Mill shall audit or inspect the facilities from which such uninspected scrap is provided on a periodic basis at a rate of not less than 10-25% of such facilities each year.

5. Unrestricted Scrap: Certain types of scrap, including "factory bundles," "demolition debris," "home scrap," "return scrap", "rail," and "flashings," as defined by common industry practice, as well as similar uncontaminated scrap, are not expected to contain free organic liquids, chlorinated plastics, or lead and will be presumed to be free of these contaminants. This scrap is not subject to the inspection and verification requirements of this plan.

6. Baghouse Bags, Internal Process and Maintenance Materials: Baghouse bags and baghouse maintenance materials that are routinely recycled by charging to the electric arc furnace, including personal protective equipment (PPE) and baghouse dust, are exempt from this PPP and not subject to the inspection and verification requirements of this plan.

B. Mercury

1. Gerdau Jackson TN Mill shall ensure that motor vehicle scrap providers are participating in the National Vehicle Switch Recovery Program (NVMSRP) by conducting a review of the End of Life Vehicle Solutions (ELVS) database to confirm that the motor vehicle scrap provider is enlisted as a participating member. Gerdau Jackson TN Mill will conduct a semi-annual review of the ELVS database to determine whether the provider remains identified as an NVMSRP participant;

   a. Gerdau Jackson TN Mill may not be able to confirm that some motor vehicle scrap providers such as Brokers are enlisted as a participating member in the NVMSRP through the ELVS database. In these cases Gerdau Jackson TN Mill will confirm that the broker is participating in the NVMSRP or another EPA-approved program by obtaining from the broker written assurance that any motor vehicle scrap provided by such broker to Gerdau Jackson TN Mill was procured from other suppliers who are signed up for and are participating in the NVMSRP or another EPA-approved program;

   b. Gerdau Jackson TN Mill will require motor vehicle scrap brokers to confirm such written assurance on a semi-annual basis.

2. Gerdau Jackson TN Mill will conduct a semi-annual review the ELVS database to corroborate that the participant is implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles by turning in mercury switches.

a. Some motor vehicle scrap providers participating in the NVMSRP or another EPA-approved program may not be able to demonstrate their participation in NVMSRP or another EPA-approved program to minimize the presence of mercury in the motor vehicle scrap from end-of-life vehicles by turning in mercury switches because they refuse to accept motor vehicle scrap that contains mercury switches. Examples would be a broker who purchases motor vehicle scrap from program participants, or a shredder that accepts only flattened vehicles from which the mercury switches already have been removed to the extent practicable prior to delivery to the shredder. For these motor vehicle scrap providers, Gerdau Jackson TN Mill will obtain written assurances from the provider or obtain other means of corroboration to verify that the participant is implementing appropriate steps to minimize the presence of mercury in the scrap from end-of-life vehicles. Written assurance will be confirmed on a semi-annual basis.

3. If a motor vehicle scrap provider does not participate in or demonstrate through written assurance that it purchases motor vehicle scrap through NVMSRP or another EPA-approved program for the removal of mercury switches, Gerdau Jackson TN Mill shall only purchase motor vehicle scrap from such provider pursuant to an EPA-approved facility-specific program for the removal of mercury switches.

III. Corrective Action

A. Lead, Chlorinated Plastics, Free Organic Liquids

1. If, during inspection of scrap pursuant to Part II(A) above, Gerdau Jackson TN Mill determines that the scrap provider has not met the specifications in part I, the scrap provider will be subject to corrective action.

   a. A nonconforming scrap load will be rejected unless contaminants causing the failure can be removed to the extent practicable. The vendor may ship Unrestricted Scrap so long as it adheres to the provisions outlined in Part II(a)(5).

   b. After a failure to meet the scrap specifications in Part I, the scrap provider must sign a statement acknowledging the requirements of the scrap specifications and provide either certification or another comparable form of reasonable assurance that the scrap specifications will be met in the future.

   c. If the vendor continues to fail to meet the scrap specifications, Gerdau Jackson TN Mill will consult with the scrap provider on the cause or reasons why the scrap loads are nonconforming and

will inform the scrap provider that it may be suspended for a period of 180 days if the problem is not resolved.

B. Mercury

1. If, Gerdau Jackson TN Mill reasonably believes, either as a result of inspection, site visits to a scrap yard, or review of the ELVS database or by other means, that a scrap supplier is not taking appropriate steps to minimize the presence of mercury switches in scrap from end-of-life vehicles, the facility shall:

   a. Issue a letter to the scrap provider reiterating the requirements of the NVMSRP or another EPA-approved program and threatening suspension if the scrap provider fails to fulfill its responsibilities under the NVMSRP or another EPA-approved program.

   b. Suspend the scrap provider if, within six months of receipt of the letter described above, the scrap provider again fails to show that it is aware of the need for and is implementing appropriate steps to minimize the presence of mercury switches in auto shred. The suspension shall only apply to shipments of motor vehicle scrap by The provider will then have to re-qualify by demonstrating that it has cured the defect that caused the failure to meet the scrap specification.

   c. For purposes of Section III A and B, if the nonconforming scrap is purchased through a broker, Gerdau Jackson TN Mill will require the broker to provide written assurances that the broker implemented corrective action as set forth in Section III of this plan with respect to the supplier of such non-conforming scrap.

IV. Program Policies, Implementation Elements, and Training and Outreach Materials

A. This section incorporates the outreach documents attached to this Pollution Prevention Plan.

Will Ownby

Will Ownby
Environmental Manager
Gerdau Long Steel North America Jackson TN Mill
PO Box 10848
Jackson, TN 38308

ATTACHMENT 3

SUPPLEMENT TO SCRAP POLLUTION PREVENTION PLAN (SPPP) PLAN
Dated May 18, 2015

57-0189 MA

GERDAU

TN. AIR POLL

2015 MAY 7

May 18, 2015

Attn: Mr. Manir Ahmed
Tennessee Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243

RECEIVED
2015 MAY 26 PM 12:
TN. DIV. OF AIR POLLUTION CONTROL

Re: Documentation for Non-Ferrous Separation System
Construction Permit Application File
Gerdau AmeriSteel U.S. Inc.
Jackson, TN Facility

Mr. Ahmed:

Gerdau AmeriSteel U.S. Inc. (Gerdau) submitted a construction permit application to modify the existing steel scrap shredder (ESRN 57-0189-01) and construct four (4) new sorting hubs at the Gerdau Jackson, TN facility on February 5, 2015. At your request, this letter documents how the proposed new sorting equipment are inherently designed to minimize the melting of scrap contaminants regulated by 40 CFR Part 63 Subpart YYYYY (National Emission Standards For Hazardous Air Pollutants For Area Sources: Electric Arc Furnace Steelmaking Facilities or "NESHAP Subpart 5Y").

The proposed sorting hubs may process scrap that was shredded prior to the effective date of NESHAP Subpart 5Y and that is currently staged in the onsite landfill. A majority of the material recovered from the new sorting hubs will include non-ferrous products that will be shipped to customers, hence the title of Gerdau's project, "Non-Ferrous Separation System". A minor amount of ferrous material may be recovered through the proposed sorting hubs and if recovered, will be directed to the existing metal scrap pile for charging to the furnace.

NESHAP Subpart 5Y requires means to minimize chlorinated plastics, lead, and free organic liquids in metallic scrap charged to an EAF furnace. NESHAP Subpart 5Y also includes mercury requirements that regulate the purchase of motor vehicle scrap. [40 CFR §63.10685(a), (b)]

The proposed sorting hubs include specially-designed equipment that are engineered to sort, separate, and recover very specific types of non-ferrous materials [insulated copper wire, copper, zurik (primarily stainless steel), zorba (primarily aluminum), and nonferrous microfines]. Step 10 (the "first" step of the set of new

sorting hubs to receive landfill material) includes an eddy current separator equipped with a dual magnetic separator. Subsequent sorting hubs (Steps 11, 12/13, 15/16) will utilize a combination of magnetic and/or density separation techniques. Ferrous material will be collected by magnets that are inherent to the sorting process, which by design minimizes chlorinated plastics, lead, and mercury switches from collection with the ferrous stream, since those materials are not magnetic.

Furthermore, purchased motor vehicle scrap processed in the new sorting hubs will comply with NESHAP Subpart 5Y by coming from operators certified for removal of mercury switches. Scrap from the landfill is not purchased motor vehicle scrap after the compliance date of NESHAP Subpart 5Y and is therefore outside the requirements of being purchased from a certified vendor.

***

Should any further information be required, please do not hesitate to contact Will Ownby, Environmental Manager at (731) 423-5274.

Sincerely,

Ricardo Anawate
VP and General Manager

Cc: Will Ownby – Gerdau
Jeffrey H. Twaddle, P.E. – ERM

Certified Mail # - 7010 1870 0002 3231 0162

57-0189

GERDAU

TN. DIV. OF
AIR POLLUTION CONTROL

2015 JUN 16 PM 11: 15

June 11, 2015

RECEIVED

Attn: Mr. Manir Ahmed
Tennessee Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243

Re: Documentation for Non-Ferrous Separation System Material Infeed
Construction Permit Application File
Gerdau AmeriSteel U.S. Inc.
Jackson, TN Facility

Mr. Ahmed:

Gerdau AmeriSteel U.S. Inc. (Gerdau) submitted a construction permit application to modify the existing steel scrap shredder (ESRN 57-0189-01) and construct four (4) new sorting hubs at the Gerdau Jackson, TN facility on February 5, 2015. At your request, this letter clarifies the infeed materials to the proposed new sorting equipment and associated compliance with 40 CFR Part 63 Subpart YYYYY (National Emission Standards For Hazardous Air Pollutants For Area Sources: Electric Arc Furnace Steelmaking Facilities or "NESHAP Subpart 5Y").

The proposed new sorting hubs will receive feed material according to the following:

- Approximately 50% from the existing scrap steel shredder or other NESHAP Subpart 5Y-compliant providers (e.g., other Gerdau shredders or other scrap shredding operations); and

- Approximately 50% from onsite landfill materials.

The existing steel scrap shredder complies with the requirements of NESHAP Subpart 5Y (as outlined in Title V Permit No. 565713). Gerdau will specify and require that any material for non-ferrous recovery that is received or purchased from other providers be compliant with the requirements of NESHAP Subpart 5Y. Compliance with NESHAP Subpart 5Y with respect to the onsite landfill material is detailed in a previously submitted letter dated May 18, 2015.

PO Box 10848, Jackson, TN • 38308 • Phone: (731) 424-5600 • Fax: (731) 422-4247 • www.gerdau.com

***

Should any further information be required, please do not hesitate to contact Will Ownby, Environmental Manager at (731) 423-5274.

Sincerely,

Ricardo Anawate
VP and General Manager

Cc: Will Ownby – Gerdau
Jeffrey H. Twaddle, P.E. – ERM

Certified Mail #: 7010 1870 0002 3231 0254

ATTACHMENT 4

COMPIANCE ASSURANCE MONITORING (CAM) PLAN
Dated June 21, 2013

MH

GERDAU

TN. DIV. OF
AIR POLLUTION CONTROL

2013 JUN 25 PM 2:40

June 21, 2013

Eric Flowers
Division of Air Pollution Control
Tennessee Department of Environment and Conservation
9th Floor, L&C Annex
401 Church St.
Nashville TN 37243-1531

RECEIVED

Re: Source No. 57-0189-01, Gerdau Long Steel North America, Jackson TN Mill, Proposed CAM Plan

Dear Mr. Flowers:

The CAM plan is described along with a table chart in this letter. In addition to the daily opacity readings and NSPS monitoring, we will, also record and monitor pressure drop across the baghouses to assure that the baghouses are continuously operating within the design pressure drops. We will report any exceedances semiannually and we retain the recordings for five years. These records will be in the form of charts and electronic data and will be made available for inspection by the Technical Secretary or representative.

This source (57-0189-02) is subject to 40 CFR Part 64-Compliance Assurance Monitoring (CAM) for particulate matter. The following table summarizes the CAM requirements:

Requirement	Description
Indicator 1: Indicator 2:	Daily opacity readings and NSPS monitoring (conditions E5-10 & E5-11 Baghouse pressure drop: within 1-13 inches and as specified in E5-2 & E5-3.
Measurement Approach	Daily Opacity readings Observation of pressure measuring device to record differential pressure.
Indicator Range	Opacity range as specified in conditions E5-10 & E5-11. Baghouse pressure drop must not be less than the pressure drop in inches of water specified in the above CAM letter and conditions E5-2 and E5-3. Any daily reading that is less than the pressure drop determined in **Condition** is considered a deviation.
Data Representativeness	Pressure measurement device is installed per manufacturer's specification to measure differential pressure across the baghouse.
Verification of Operational Status only if new monitoring	N/A
QA/QC Practices and Criteria	Periodic calibration checks and routine maintenance will be performed on the pressure drop instrumentation..
Monitoring Frequency	Opacity readings daily. Pressure drop readings monitored by PLC that triggers alarm when outside the defined range and records continuously. Once a day or continuously with a data average..
Data Collection Procedures	Designated persons/ PLC recorder will read and record the pressure drop readings continuously.
Averaging Period	Opacity 6-min average. Pressure drop to be determined.

According to good operating practice, the range of normal operation for the baghouses is 1-13 inches. We will continuously record the pressure drop and report semiannually the pressure readings that are beyond the "normal" range. The baghouses are controlled by a PLC, programmable logic controller, that triggers the cleaning cycle when the pressure drop across the bags exceeds 8 inches water column. Baghouses are capable of

GERDAU

maintaining a high degree of efficiency and compliance with applicable grainloading limits at very low and very high pressure drops. In other words, operating beyond the normal pressure drop range does not necessarily mean that the applicable opacity or grainloading standard is not being met. In our case the applicable standards are the grainloading of 0.0041 gr/scf and the opacity limit of 3 percent. If the baghouse pressure drop goes beyond the indicator range of 13 inches to the extent that the baghouse may not be operating normally, an alarm sounds and corrective action is taken.

We suggest that the added pressure drop monitoring, would go into effect once our new PSD permit conditions are rolled into our next Title V permit.

Sincerely,

Will Ownby

Will Ownby
Environmental Manager
Gerdau Long Steel North America
Jackson Tennessee Mill

Certified Mail #: 7010 0290 0003 0345 5511

ATTACHMENT 5

TABLE 1 TO SUBPART YYYYY OF PART 63 –
APPLICABILITY OF GENERAL PROVISIONS TO SUBPART YYYYY

Table 1 to Subpart YYYYY of Part 63—Applicability of General Provisions to Subpart YYYYY

As required in §63.10691(a), you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table.

Citation	Subject	Applies to subpart YYYYY?	Explanation
§63.1(a)(1), (a)(2), (a)(3), (a)(4), (a)(6), (a)(10)-(a)(12), (b)(1), (b)(3), (c)(1), (c)(2), (c)(5), (e)	Applicability	Yes	
§63.1(a)(5), (a)(7)-(a)(9), (b)(2), (c)(3), (c)(4), (d)	Reserved	No	
§63.2	Definitions	Yes	
§63.3	Units and Abbreviations	Yes	
§63.4	Prohibited Activities and Circumvention	Yes	
§63.5	Preconstruction Review and Notification Requirements	Yes	
§63.6(a), (b)(1)-(b)(5), (b)(7), (c)(1), (c)(2), (c)(5), (e)(1), (e)(3)(i), (e)(3)(iii)-(e)(3)(ix), (f), (g), (h)(1), (h)(2), (h)(5)-(h)(9), (i), (j)	Compliance with Standards and Maintenance Requirements	Yes	
§63.6(b)(6), (c)(3), (c)(4), (d), (e)(2), (e)(3)(ii), (h)(3), (h)(5)(iv)	Reserved	No	
§63.7	Applicability and Performance Test Dates	Yes	
§63.8(a)(1), (a)(2), (b), (c), (d), (e), (f)(1)-(5), (g)	Monitoring Requirements	Yes	Requirements apply if a COMS or CEMS is used.
§63.8(a)(3)	[Reserved]	No	
§63.8(a)(4)	Additional Monitoring Requirements for Control Devices in §63.11	No	
§63.8(c)(4)	Continuous Monitoring System Requirements	Yes	Requirements apply if a COMS or CEMS is used.
§63.8(f)(6)	RATA Alternative	Yes	Requirements apply if a CEMS is used.
§63.9(a), (b)(1), (b)(2), (b)(5), (c), (d), (f), (g), (h)(1)-(h)(3), (h)(5), (h)(6), (i), (j)	Notification Requirements	Yes	
§63.9(b)(3), (h)(4)	Reserved	No	
§63.9(b)(4)		No	
§63.10(a), (b)(1), (b)(2)(i)-(v), (b)(2)(xiv), (b)(3), (c)(1), (c)(5)-(c)(8), (c)(10)-(c)(15), (d), (e)(1)-(e)(4), (f)	Recordkeeping and Reporting Requirements	Yes	Additional records for CMS in §63.10(c) (1)-(6), (9)-(15), and reports in §63.10(d)(1)-(2) apply if a COMS or CEMS is used.
§63.10(b)(2)(xiii)	CMS Records for RATA Alternative	Yes	Requirements apply if a CEMS is used.
§63.10(c)(2)-(c)(4), (c)(9)	Reserved	No	

Citation	Subject	Applies to subpart YYYYY?	Explanation
§63.11	Control Device Requirements	No	
§63.12	State Authority and Delegations	Yes	
§§63.13-63.16	Addresses, Incorporations by Reference, Availability of Information, Performance Track Provisions	Yes	

ATTACHMENT 6

AGREEMENT LETTERS

STRAIGHTNER
D35LX - INSTALLED
NOV. 1985

TENNESSEE DEPARTMENT OF HEALTH AND ENVIRONMENT
Bureau of Environment
T.E.R.R.A. BUILDING
150 NINTH AVENUE NORTH
NASHVILLE, TENNESSEE 37219-5404

OCT 22 '85

Mr. Ned William Robbins
Florida Steel Corporation
P. O. Box 3855
Jackson, TN 38303

Re: 57-0189-03-A1

Dear Mr. Robbins:

We have received your application for a permit dated July 31, 1985. Upon reviewing your application for impact on air quality, using the allowable emissions by the regulations, it was predicted that the ambient air quality standards would be jeopardized. Therefore, we will not be able to issue your permit based on current allowable emissions. However, you may choose to agree to the following limitation concerning your baghouse on your D35LX Straightener pursuant to Rule 1200-3-7-.01(5) of the Tennessee Air Pollution Control Regulations:

> Particulate matter emitted from this source shall not exceed 2.15 pounds per hour.

Agreement to the above condition will mean that you will need a construction permit if you wish to exceed this limitation. The source will also be subject to any restrictions which apply to new sources at the time the new construction permit is issued.

If you have any questions concerning this letter, please contact Malcolm Butler at 615-741-3651.

To signify your agreement please sign below and return this letter to Malcolm Butler, Air Pollution Control Division, New Source Review Section, 150 Ninth Avenue North, Nashville, Tennessee 37219-5404.

Thank you for your cooperation in this matter.

Very truly yours,

John W. Walton
for Harold E. Hodges, P.E.
Technical Secretary
Tennessee Air Pollution Control Board

HEH/MB/ckh APC-132-AQ singular

cc: Regional Office

Mr. Ned William Robbins hereby agrees to the above limitation, in behalf of Florida Steel Corporation.

Signature: W. A. Manuel Ned William Robbins

Title: Div. Mgr. Engineering

Date: 10-30-85 10-30-85

GERDAU

Tuesday, October 22, 2019

State of Tennessee
Department of Environment and Conservation
Division of Air Pollution Control
15th Floor, WRS Tennessee Tower
312 Rosa L. Parks Avenue
Nashville, TN 37243

RE: Gerdau Renewal Permit Application New Permit Number 5744449

Dear State Official;

This is an agreement letter from Gerdau Ameristeel U.S. Inc. Jackson TN Mill for the following conditions associated with our Renewal Title V permit number 574449. This letter will take the place of the letters used in the previous permits. Gerdau Ameristeel U.S. Inc. agrees to the following conditions:

1) Unless otherwise specified, visible emissions from emission sources at the facility will not exceed 20% opacity as determined utilizing EPA Method 9,
2) **Source 57-0189-01:** Total operating hours for the shredder and ferrous material handling/separation equipment (57-0189-01) will not exceed 2,080 hours per year
3) **Source 57-0189-02**: Visible emissions from the shop, due solely to operations of any EAF(s), will not exceed 20% opacity during tapping as determined utilizing EPA Method 9,
4) **Source 57-0189-02**: PM emissions from emission source 57-0189-02, not passing through the control system, will not exceed 3.8 pounds per hour and 13.5 tons per year,
5) **Source 57-0189-03**: Visible emissions from emission source 57-0189-03 will not exceed 10% opacity utilizing EPA Method 9,
6) **Source 57-0189-04**: PM emissions will not exceed 2.6 pounds per hour,
7) **Source 57-0189-04**: Usage of No. 2 fuel oil will not exceed 1,000,000 gallons during any period of 12 consecutive months,
8) **Source 57-0189-04:** The sulfur content of the No. 2 fuel oil used will not exceed 0.5% sulfur by weigh
9) **Source 57-0189-04:** NO_X emissions will not exceed 60.0 pounds per hour. This value is based on an emission rate of 400 pounds of NO_X emitted per million standard cubic feet of natural gas combusted
10) **Source 57-0189-04:** Visible emissions from emission source 57-0189-04 will not exceed 10% opacity as determined utilizing EPA Method 9

If you have any questions with this agreement letter or we need to adjust the conditions please feel free to give me a call at 731-423-5274.

Sincerely,

Will Ownby
Environmental Manager
Gerdau Ameristeel U.S. Inc. - Jackson Tennessee Steel Mill

GERDAU

August 3, 2021

Technical Secretary
Tennessee Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243

RE: Gerdau AmeriSteel U.S. Inc., Facility ID 57-0189
Jackson, TN Facility
Construction Permit Application for Post Processing Heating Operation for Round Bars

To Whom It May Concern:

On behalf of Gerdau AmeriSteel U.S. Inc., please find the enclosed a construction permit application for the relocation of a post processing heating operation for round bars from the Minnesota facility to the Jackson, TN facility. Gerdau AmeriSteel U.S. Inc. (Gerdau) owns and operates a steel mill facility including a steel scrap shredder and electric arc steel melting furnace (EAF) located at 801 Gerdau Drive in Jackson, Madison County, Tennessee. The facility currently operates under the authority granted by Title V Permit No. 574449 issued on December 11, 2019 by the Tennessee Department of Environment and Conservation (TDEC).

The proposed project will be minor with respect to federal new source review/prevention of significant deterioration permitting.

As allowed by 1200-03-07-.01(5) of the Tennessee air pollution regulations, Gerdau AmeriSteel formally agrees to limit the hours of operation of this operation to 4,700 hours during any period of twelve consecutive months. Gerdau also agrees to limit particulate matter emissions from this operation to 0.16 pounds per hour (0.38 tons per year).

Should any further information be required, please do not hesitate to contact our consultant, Steve Marquardt of ERM at (615) 656-7100.

Sincerely,

Josh Wigger, Vice President/General Manager

Jackson Steel Mill
P. O. Box 10848, Jackson, TN 38308 • (731) 424-5600 • fax (731) 422-4247

GERDAU

October 15, 2021

Technical Secretary
Tennessee Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243

RE: Agreement Letter for NOx
Gerdau AmeriSteel U.S. Inc.,
Emission Source Reference No. 57-0189-11/ Permit No. 979247

To Whom It May Concern:

In accordance with TAPCR 1200-03-07-.07(2), Gerdau AmeriSteel U.S. Inc., agrees to the following NOx limits for the post process heating operation as the above referenced source.

	NOx Emission Limit	
	Pound per Hour	Ton per year
Agreed Emission Limit	2.12	4.98

Compliance will be demonstrated by tracking hours of operations of the post process heating operation and the use of NOx emission factor from AP-42, 5th Edition, Volume I, Section 1.4: Natural Gas Combustion, Table 1.4-1 and the capacity of the burners.

I have reviewed this document in its entirety and to the best of my knowledge, and based on information and belief formed after reasonable inquiry, the statements and information contained in this document are true, accurate, and complete.

Should you have any questions or concerns, please feel free to contact Mr. Will Ownby, Environmental Manager, at (731)423-5274.

Sincerely,

Josh Wigger, Vice President/General Manager

Attachments
Cc: Greg Forte, TDEC
Will Ownby, Gerdau
Jeff Twaddle, ERM

Jackson Steel Mill
P. O. Box 10848, Jackson, TN 38308 • (731) 424-5600 • fax (731) 422-4247

GERDAU

May 10, 2023

Technical Secretary
Tennessee Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243

RE: Gerdau AmeriSteel U.S. Inc., Jackson, TN Facility
Facility ID 57-0189
Significant Modification Application for Post Processing Heating Operation for Round Bars and Startup Certification

Dear Technical Secretary:

Gerdau AmeriSteel U.S. Inc. owns and operates a steel mill facility including a steel scrap shredder and electric arc steel melting furnace (EAF) located at 801 Gerdau Drive in Jackson, Madison County, Tennessee. The facility currently operates under the authority granted by Title V Permit No. 574449 issued on December 11, 2019 by the Tennessee Department of Environment and Conservation (TDEC). Gerdau also holds Construction Permit No. 979247 issued by the Division on November 18, 2001 for the installation of a post processing heating operation for round bars. Construction of the heating operation was completed according to the specifications contained in the construction permit application.

Condition G8 of the construction permit to submit a startup notification within 30 days of commencing operation. Operation of this new source began April 18, 2023, therefore the due date for the Startup Notice is May 18, 2023. Please find the completed notification as Attachment A to this letter.

Condition G6 of the construction permit requires Gerdau to submit a Significant Modification to the Title V Operating Permit within 30 days of initial startup of the new source, making the due date for the Significant Modification May 18, 2023. Note that Condition G7 states that the construction permit will serve as a temporary operating permit until the Division issues the modified Title V operating permit. Please find the completed Significant Modification application froms as Attachment B to this letter. The emission calculations are included as Attachment C.

Should any further information be required, please do not hesitate to contact Will Ownby, our plant's Environmental Manger, at (731) 423-5274, or by email at William.Ownby@gerdau.com.

Sincerely,

Joshua Wigger, Vice President/General Manager

Jackson Steel Mill
P. O. Box 10848, Jackson, TN 38308 • (731) 424-5600 • fax (731) 422-4247

Attachment B
Title V Significant Modification Application

State of Tennessee
Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243
Telephone: (615) 532-0554

TITLE V PERMIT APPLICATION
INDEX OF AIR POLLUTION PERMIT APPLICATION FORMS

Section 1: Identification and Diagrams		
This application contains the following forms:	APC Form 1, Facility Identification	1
	APC Form 2, Operations and Flow Diagrams	1

Section 2: Emission Source Description Forms		
		Total number of this form
This application contains the following forms (one form for each incinerator, printing operation, fuel burning installation, etc.):	APC Form 3, Stack Identification	
	APC Form 4, Fuel Burning Non-Process Equipment	
	APC Form 5, Stationary Gas Turbines or Internal Combustion Engines	
	APC Form 6, Storage Tanks	
	APC Form 7, Incinerators	
	APC Form 8, Printing Operations	
	APC Form 9, Painting and Coating Operations	
	APC Form 10, Miscellaneous Processes	1
	APC Form 33, Stage I and Stage II Vapor Recovery Equipment	
	APC Form 34, Open Burning	

Section 3: Air Pollution Control System Forms		
		Total number of this form
This application contains the following forms (one form for each control system in use at the facility):	APC Form 11, Control Equipment - Miscellaneous	
	APC Form 13, Adsorbers	
	APC Form 14, Catalytic or Thermal Oxidation Equipment	
	APC Form 15, Cyclones/Settling Chambers	
	APC Form 17, Wet Collection Systems	
	APC Form 18, Baghouse/Fabric Filters	

(OVER)

Section 4: Compliance Demonstration Forms		
		Total number of this form
This application contains the following forms (one form for each incinerator, printing operation, fuel burning installation, etc.):	APC Form 19, Compliance Certification - Monitoring and Reporting - Description of Methods for Determining Compliance	1
	APC Form 20, Continuous Emissions Monitoring	
	APC Form 21, Portable Monitors	
	APC Form 22, Control System Parameters or Operating Parameters of a Process	1
	APC Form 23, Monitoring Maintenance Procedures	
	APC Form 24, Stack Testing	
	APC Form 25, Fuel Sampling and Analysis	
	APC Form 26, Record Keeping	1
	APC Form 27, Other Methods	
	APC Form 28, Emissions from Process Emissions Sources / Fuel Burning Installations / Incinerators	1
	APC Form 29, Emissions Summary for the Facility or for the Source Contained in This Application	
	APC Form 30, Current Emissions Requirements and Status	1
	APC Form 31, Compliance Plan and Compliance Certification	
	APC Form 32, Air Monitoring Network	

Section 5: Statement of Completeness and Certification of Compliance

I have reviewed this application in its entirety and to the best of my knowledge, and based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate, and complete. I have provided all the information that is necessary for compliance purposes and this application consists of 9 pages and they are numbered from page 1 to 9. The status of this facility's compliance with all applicable air pollution control requirements, including the enhanced monitoring and compliance certification requirements of the Federal Clean Air Act, is reported in this application along with the methods to be used for compliance demonstration.

Name and Title of Responsible Official	Telephone Number with Area Code
Joshua Wigger	(731) 424-5600

Signature of Responsible Official

Date of Application

(For definition of responsible official, see instructions for APC Form 1)

State of Tennessee
Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243
Telephone: (615) 532-0554

APC 1

TITLE V PERMIT APPLICATION
FACILITY IDENTIFICATION

SITE INFORMATION				
1 Organization's legal name: Gerdau Ameristeel U.S. Inc.			For APC Use Only	APC company point no.
2 Site name (if different from legal name): N/A				APC Log/Permit no.
3 Site address (St./Rd./Hwy.): 801 Gerdau Drive			NAICS or SIC Code: 33	
City or distance to nearest town: Jackson		Zip code: 38305	County name: Madison	
4 Site location (in Lat./Long)	Latitude: 35.727493		Longitude: -88.810269	
CONTACT INFORMATION (RESPONSIBLE OFFICIAL)				
5 Responsible official contact: Joshua Wigger			Phone number with area code: 731-424-5600	
6 Mailing address (St./Rd./Hwy.): PO Box 10848			Fax number with area code: 731-422-4247	
City: Jackson	State: TN	Zip code: 38308	Email address: josh.wigger@gerdau.com	
CONTACT INFORMATION (TECHNICAL)				
7 Principal technical contact: Will Ownby			Phone number with area code: 731-423-5274	
8 Mailing address (St./Rd./Hwy.): PO Box 10848			Fax number with area code: 731-422-4247	
City: Jackson	State: TN	Zip code: 38308	Email address: william.ownby@gerdau.com	
CONTACT INFORMATION (BILLING)				
11 Billing contact: Will Ownby			Phone number with area code: 731-423-5274	
12 Mailing address (St./Rd./Hwy.): PO Box 10848			Fax number with area code: 731-422-4274	
City: Jackson	State: TN	Zip code: 38308	Email address: william.ownby@gerdau.com	

TYPE OF PERMIT REQUESTED

13 Permit requested for:

Initial application to operate:		Minor permit modification:	
Permit renewal to operate:		Significant modification:	✓
Administrative permit amendment:		Construction permit:	

(OVER)

HAZARDOUS AIR POLLUTANTS, DESIGNATIONS, AND OTHER PERMITS ASSOCIATED WITH FACILITY

14. Is this facility subject to the provisions governing prevention of accidental releases of hazardous air contaminants contained in Chapter 1200-03-32 of the Tennessee Air Pollution Control regulations? [ ] Yes [✓] No

If the answer is Yes, are you in compliance with the provisions of Chapter 1200-03-32 of the Tennessee Air Pollution Control regulations? [ ] Yes [ ] No

15. If facility is located in an area designated as "Non-Attainment" or "Additional Control", indicate the pollutant(s) for the designation.

N/A

16. List all valid Air Pollution permits issued to the sources contained in this application [identify all permits with most recent permit numbers and emission source reference numbers listed on the permit(s)].

Construction Permit No. 979247

Significant Modification to Title V Operating Permit No. 574449

17. Page number:	Revision number:	Date of revision:
1	N/A	N/A

State of Tennessee
Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243
Telephone: (615) 532-0554

TITLE V PERMIT APPLICATION
OPERATIONS AND FLOW DIAGRAMS

1. Please list, identify, and describe briefly process emission sources, fuel burning installations, and incinerators that are contained in this application. Please attach a flow diagram for this application.

Condition G6 of Construction Permit 979247 directs that Gerdau submit a Significant Modification application to incorporate the newly installed post processing heating operation for round bars into the Title V Operating Permit.

The purpose of the operation is to heat the ends of steel bars post production. The bars are eventually used in the manufacture of mill balls and the purpose of heating the ends of the bars is to reduce cracking when the bars are later sheared into short lengths. Air emissions result from the combustion of natural gas. The post processing heating operation includes two burner walls with an installed heat input capacity of 21.6 MMBtu per hour that will operate on natural gas with no back up fuel.

2. List all insignificant activities which are exempted because of size or production rate and cite the applicable regulations.

N/A

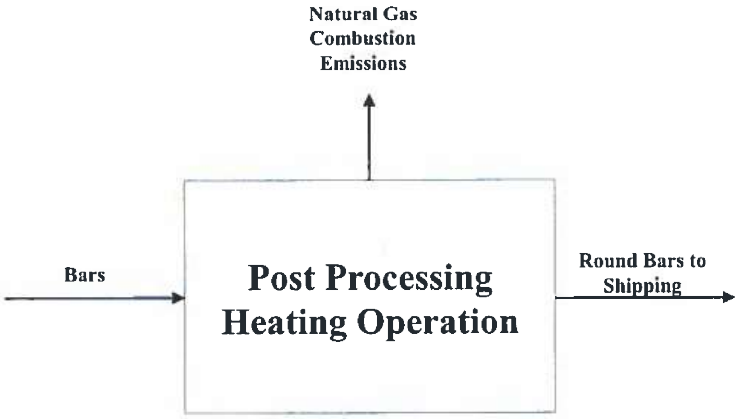
3. Are there any storage piles?

YES _____ NO X

4. List the states that are within 50 miles of your facility.

Alabama, Missouri, Arkansas, Mississippi, Kentucky

5. Page number	Revision Number	Date of Revision:
2	N/A	N/A



Environmental Resources Management		
DESIGN: Mariah Martinez	DRAWN: Mariah Martinez	CHKD.:
DATE: July 2021	SCALE: N/A	REV.: 0
W.O. NO.: 0599943		

Figure 1-1
Process Flow Diagram
Post Processing Heating Operation Round Bars
Gerdau AmeriSteel U.S., Inc.
Jackson, Madison County, Tennessee

ERM

State of Tennessee
Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243
Telephone: (615) 532-0554

TITLE V PERMIT APPLICATION
MISCELLANEOUS PROCESSES

GENERAL IDENTIFICATION AND DESCRIPTION

1. **Facility name:**
Gerdau Ameristeel U.S., Inc.

2. **Process emission source (identify):**
57-0189-11 Post Heating Round Bars

3. Stack ID or flow diagram point identification(s)	4. Year of construction or last modification
N/A	2023

If the emissions are controlled for compliance, attach an appropriate Air Pollution Control system form.

5. Normal operating schedule 24 Hrs./Day 4 Days/Wk. 60 Days/Yr.

6. Location of this process emission source in UTM coordinates: UTM Vertical: 3955234.72 UTM Horizontal: 336276.56

7. Describe this process (Please attach a flow diagram of this process) and check one of the following:

[✓] Batch [ ] Continuous

PROGESS MATERIAL INPUT AND OUTPUT

8. List the types and amounts of raw materials input to this process:

Material	Storage/Material handling process	Average usage (units)	Maximum usage (units)
Bar	Natural gas-fired burner	60,000 tpy	195,833 tpy

9. List the types and amounts of primary products produced by this process:

Material	Storage/Material handling process	Average usage (units)	Maximum usage (units)
Round Bar	Shipped	60,000 tpy	195,833 tpy

10. Process fuel usage:

Type of fuel	Max heat input (10^6 BTU/Hr.)	Average usage (units)	Maximum usage (units)
Natural Gas	21.6	30.49 MMscf/yr	99.53 MMscf/yr

11. List any solvents, cleaners, etc., associated with this process:
N/A

If the emissions and/or operations of this process are monitored for compliance, please attach the appropriate Compliance Demonstration form.

12. Describe any fugitive emissions associated with this process, such as outdoor storage piles, open conveyors, open air sand blasting, material handling operations, etc. (please attach a separate sheet if necessary)
N/A

13. Page number	Revision Number	Date of Revision
4	N/A	N/A

State of Tennessee
Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243
Telephone (615) 532-0554

TITLE V PERMIT APPLICATION
COMPLIANCE CERTIFICATION - MONITORING AND REPORTING
DESCRIPTION OF METHODS USED FOR DETERMINING COMPLIANCE

All sources that are subject to 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations are required to certify compliance with all applicable requirements by including a statement within the permit application of the methods used for determining compliance. This statement must include a description of the monitoring, recordkeeping, and reporting requirements and test methods. In addition, the application must include a schedule for compliance certification submittals during the permit term. These submittals must be no less frequent than annually and may need to be more frequent if specified by the underlying applicable requirement or the Technical Secretary.

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Gerdau AmeriSteel U.S., Inc.
2. Process emission source, fuel burning installation, or incinerator (identify): 57-0189-11 Post Heating Round Bars
3. Stack ID or flowdiagram point identification(s): N/A

METHODS OF DETERMINING COMPLIANCE

4. This source as described under Item #2 of this application will use the following method(s) for determining compliance with applicable requirements (and special operating conditions from an existing permit). Check all that apply and attach the appropriate form(s):

- [ ] Continuous Emission Monitoring (CEM) - APC 20
  Pollutant(s):
- [ ] Emission Monitoring Using Portable Monitors - APC 21
  Pollutant(s):
- [x] Monitoring Control System Parameters or Operating Parameters of a Process - APC 22
  Pollutant(s): Opacity
- [ ] Monitoring Maintenance Procedures - APC 23
  Pollutant(s):
- [ ] Stack Testing - APC 24
  Pollutant(s):
- [ ] Fuel Sampling & Analysis (FSA) - APC 25
  Pollutant(s):
- [x] Recordkeeping - APC 26
  Pollutant(s): Source Repair&Maintenance Log, Heat Cap.,Fuel Type, Hours of Operation
- [ ] Other (please describe) - APC 27
  Pollutant(s):

5. Compliance certification reports will be submitted to the Division according to the following schedule:
   Start date: According to the schedule in the Title V Operating Permit upon Startup of new source.
   And every: 365 days thereafter.
6. Compliance monitoring reports will be submitted to the Division according to the following schedule:
   Start date: According to the schedule in the Title V Operating Permit upon Startup of new source.
   And every: 365 days thereafter.

State of Tennessee
Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243
Telephone: (615) 532-0554

TITLE V PERMIT APPLICATION - COMPLIANCE DEMONSTRATION BY MONITORING CONTROL SYSTEM PARAMETERS OR OPERATING PARAMETERS OF A PROCESS

The monitoring of a control system parameter or a process parameter shall be acceptable as a compliance demonstration method provided that a correlation between the parameter value and the emission rate of a particular pollutant is established.

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name	2. Stack ID or flow diagram point identification(s)
Gerdau AmeriSteel U.S., Inc.	N/A

3. Emission source

57-0189-11 Post Heating Round Bars

MONITORING DESCRIPTION

4. Pollutant(s) being monitored

Opacity

5. Description of the method of monitoring and establishment of correlation between the parameter value and the emission rate of a particular pollutant

Visible emissions from the Post Heating Round Bars operation will not exceed twenty percent (20%) opacity.

Per the opacity matrix attached to the Title V Operating Permit, visible emission evaluations are not required for natural gas combustion source.

6. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated).

N/A - Per the opacity matrix attached to the Title V Operating Permit, visible emission evaluations are not required for natural gas combustion source.

7. Page number	Revision number	Date of revision
6	N/A	N/A

State of Tennessee
Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243
Telephone: (615) 532-0554

TITLE V PERMIT APPLICATION
COMPLIANCE DEMONSTRATION BY RECORDKEEPING

Recordkeeping shall be acceptable as a compliance demonstration method provided that a correlation between the parameter value recorded and the applicable requirement is established

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name	2. Stack ID or flow diagram point identification(s)
Gerdau AmeriSteel U.S., Inc.	N/A

3. Emission source (identify)

57-0189-11 Post Heating Round Bars

MONITORING AND RECORDKEEPING DESCRIPTION

4. Pollutant(s) or parameter being monitored

NOx, CO, PM, SO2, VOC emission limits are met provided the operating time is limited to 4,700 hours during any period of twelve consecutive months and the use of natural gas.

5. Material or parameter being monitored and recorded

Hours of Operation, Log of Source Repair and Maintenance, Documentation of fuel type (natural gas only), Documentation of Maximum Heat Input Rate.

6. Method of monitoring and recording

Daily record of burner's hours of operation. The total number of hours of operation will not exceed 4,700 hours during any period of twelve consecutive months.

7. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated)

Monthly

8. Page number	Revision number	Date of revision
7	N/A	N/A

State of Tennessee
Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243
Telephone: (615) 532-0554

TITLE V PERMIT APPLICATION
EMISSIONS FROM PROCESS EMISSION SOURCE / FUEL BURNING INSTALLATION / INCINERATOR

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name:	2. Stack ID or flowdiagram point identification(s):
Gerdau AmeriSteel U.S., Inc.	N/A

3. Process emission source / Fuel burning installation / Incinerator (identify):
57-0189-11 Post Heating Round Bars

EMISSIONS SUMMARY TABLE – CRITERIA AND FUGITIVE EMISSIONS

4. Complete the following emissions summary for regulated air pollutants. Fugitive emissions shall be included. Attach calculations and emission factor references.

Air Pollutant	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour- Item 8, APC 30)
Particulate Matter (TSP)	0.38		< 0.38	
(Fugitive Emissions)				
Sulfur Dioxide	0.03		< 0.03	
(Fugitive Emissions)				
Volatile Organic Compounds	0.27		< 0.27	
(Fugitive Emissions)				
Carbon Monoxide	4.18		< 4.18	
(Fugitive Emissions)				
Lead	2.49E-05		< 2.49E-05	
(Fugitive Emissions)				
Nitrogen Oxides	4.98		< 4.98	
(Fugitive Emissions)				
Total Reduced Sulfur				
(Fugitive Emissions)				
Mercury	1.29E-05		< 1.29E-05	
(Fugitive Emissions)				

(Continued on next page)

(Continued from last page)

AIR POLLUTANT	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour- Item 8, APC 30)
Asbestos				
(Fugitive Emissions)				
Beryllium	5.97E-07		< 5.97E-07	
(Fugitive Emissions)				
Vinyl Chloride				
(Fugitive Emissions)				
Fluorides				
(Fugitive Emissions)				
Gaseous Fluorides				
(Fugitive Emissions)				
Greenhouse Gases in CO_2 Equivalents				

EMISSIONS SUMMARY TABLE – FUGITIVE HAZARDOUS AIR POLLUTANTS

5 Complete the following emissions summary for regulated air pollutants that are hazardous air pollutant(s) Fugitive emissions shall be included Attach calculations and emission factor references

Air Pollutant & CAS	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour- Item 8, APC 30)
See Attachment C				

6 Page number 8 | Revision number N/A | Date of revision N/A

State of Tennessee
Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243
Telephone: (615) 532-0554

TITLE V PERMIT APPLICATION
CURRENT EMISSIONS REQUIREMENTS AND STATUS

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name:	2. Emission source number
Gerdau AmeriSteel U.S., Inc.	57-0189-11

3. Describe the process emission source / fuel burning installation / incinerator.

Post Heating Round Bars

EMISSIONS AND REQUIREMENTS

4. Identify if only a part of the source is subject to this requirement	5. Pollutant	6. Applicable requirement(s): TN Air Pollution Control Regulations, 40 CFR, permit restrictions, air quality based standards	7. Limitation	8. Maximum actual emissions	9. Compliance status (In/Out)
Post Heating Round Bars	NOx	TAPCR 1200-03-07-.07(2)	2.12 lbs/hr	< 2.12 lbs/hr	In
Post Heating Round Bars	NOx	TAPCR 1200-03-07-.07(2)	& 4.98 ton/12mo	& <4.98 ton/12mo	In
Post Heating Round Bars	CO	TAPCR 1200-03-07-.07(2)	4.18 ton/12 mo	< 4.18 ton/12 mo	In
Post Heating Round Bars	SO2	TAPCR 1200-03-14-.03(5)	0.02 lbs/hr	< 0.02 lbs/hr	In
	PM	TAPCR 1200-03-07-.01(5)	0.16 lb/hr	< 0.16 lb/hr	In
	VOC	TAPCR 1200-03-07-.07(2)	0.28 ton/12 mo	0.28 ton/12 mo	In
	Opacity	TAPCR 1200-03-05-.01(1)	20%	< 20%	In
	All	TAPCR 1200-03-07-.01(5)	4,700 hrs/12 mo	< 4,700 hrs/12 mo	In

10. Other applicable requirements (new requirements that apply to this source during the term of this permit)

N/A					

11. Page number	Revision number	Date of revision
9	N/A	N/A

Attachment C
Emission Calculations

Gerdau Ameristeel US, Inc.
Source 57-0189-11 Post Process Heating Operation
Actual Emissions

Parameter	Value	Units
Allowable Annual Operation	1,440	hrs/yr
Average Annual Production	60,000	tpy
Heat Input Capacity	21.6	MMBtu/hr
Heating Value	1,020	Btu/scf
Maximum Hourly Natural Gas Consumption	2.12E-02	MMscf/hr

Notes:

1. Heating value obtained from AP-42, 5th Edition, Volume I, Section 1.4: Natural Gas Combustion

Pollutant Type	Pollutant	Emission Factor (lb/MMscf)	Hourly Emission Rate (lb/hr)	Annual Emission Rate (tpy)
Criteria	NOx	100	2.12	1.52
	CO	84	1.78	1.28
	Total PM	7.6	0.16	0.12
	Condensable PM	5.7	0.12	0.09
	Filterable PM	1.9	4.02E-02	0.03
	SO_2	0.6	1.27E-02	0.01
	VOC	5.5	0.12	0.08
	Lead	5.00E-04	1.06E-05	7.62E-06
Greenhouse Gas (GHG)	CO_2	120,000	2,541	1,830
	CH_4	2.3	4.87E-02	0.04
	N_2O	2.2	4.66E-02	0.03
	Greenhouse Gas Equivalent(CO_2e)	-	2,556	1,841

Gerdau Ameristeel US, Inc.
Source 57-0189-11 Post Process Heating Operation
Actual Emissions

Hazardous Air Pollutants (HAPs)	2-Methylnaphthalene	2.40E-05	5.08E-07	3.66E-07
	3-Methylcholanthrene	1.80E-06	3.81E-08	2.74E-08
	7,12-Dimethylbenz(a)anthracene	1.60E-05	3.39E-07	2.44E-07
	Acenapthene	1.80E-06	3.81E-08	2.74E-08
	Acenaphthylene	1.80E-06	3.81E-08	2.74E-08
	Anthracene	2.40E-06	5.08E-08	3.66E-08
	Benz(a)anthracene	1.80E-06	3.81E-08	2.74E-08
	Benzene	2.10E-03	4.45E-05	3.20E-05
	Benzo(a)pyrene	1.20E-06	2.54E-08	1.83E-08
	Benzo(b)fluoranthene	1.80E-06	3.81E-08	2.74E-08
	Benzo(g,h,i)perylene	1.20E-06	2.54E-08	1.83E-08
	Benzo(k)fluoranthene	1.80E-06	3.81E-08	2.74E-08
	Chrysene	1.80E-06	3.81E-08	2.74E-08
	Dibenzo(a,h)anthracene	1.20E-06	2.54E-08	1.83E-08
	Dichlorobenzene	1.20E-03	2.54E-05	1.83E-05
	Fluoranthene	3.00E-06	6.35E-08	4.57E-08
	Fluorene	2.80E-06	5.93E-08	4.27E-08
	Formaldehyde	0.08	1.59E-03	1.14E-03
	Hexane	1.80	3.81E-02	0.03
	Indeno(1,2,3-cd)pyrene	1.80E-06	3.81E-08	2.74E-08
	Naphthalene	6.10E-04	1.29E-05	9.30E-06
	Phenanathrene	1.70E-05	3.60E-07	2.59E-07
	Pyrene	5.00E-06	1.06E-07	7.62E-08
	Toluene	3.40E-03	7.20E-05	5.18E-05
	Arsenic	2.00E-04	4.24E-06	3.05E-06
	Beryllium	1.20E-05	2.54E-07	1.83E-07
	Cadmium	1.10E-03	2.33E-05	1.68E-05
	Chromium	1.40E-03	2.96E-05	2.13E-05
	Cobalt	8.40E-05	1.78E-06	1.28E-06
	Manganese	3.80E-04	8.05E-06	5.79E-06
	Mercury	2.60E-04	5.51E-06	3.96E-06
	Nickel	2.10E-03	4.45E-05	3.20E-05
	Selenium	2.40E-05	5.08E-07	3.66E-07
	Total HAPs	1.89	4.00E-02	0.03

Notes:

2. Emission factors obtained from AP-42, 5th Edition, Volume I, Section 1.4: Natural Gas Combustion, Table 1.4-1: Emssion Factors for Nitrogen Oxides (NOx) and Carbon Monoxide (CO) from Natural Gas Combustion, Table 1.4-2: Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion, and Table 1.4-3: Emission Factors for Speciated Organic Compounds from Natural Gas Combustion.

3. GHG equivalent factors from 40 CFR Part 98, Table A-1.

Gerdau Ameristeel US, Inc.
Source 57-0189-11 Post Process Heating Operation
Potential Emissions

Parameter	Value	Units
Allowable Annual Operation	4,700	hrs/yr
Maximum Annual Production	195,833	tpy
Heat Input Capacity	21.6	MMBtu/hr
Heating Value	1,020	Btu/scf
Maximum Hourly Natural Gas Consumption	0.02	MMscf/hr
Maximum Annual Natural Gas Consumption	99.53	MMscf/yr

Notes:

1. Heating value obtained from AP-42, 5th Edition, Volume I, Section 1.4: Natural Gas Combustion

Pollutant Type	Pollutant	Emission Factor (lb/MMscf)	Hourly Emission Rate (lb/hr)	Annual Emission Rate (tpy)
Criteria	NOx	100	2.12	4.98
	CO	84	1.78	4.18
	Total PM	7.6	0.16	0.38
	Condensable PM	5.7	0.12	0.28
	Filterable PM	1.9	4.02E-02	0.09
	SO_2	0.6	1.27E-02	0.03
	VOC	5.5	0.12	0.27
	Lead	5.00E-04	1.06E-05	2.49E-05
Greenhouse Gas (GHG)	CO_2	120,000	2,541	5,972
	CH_4	2.3	4.87E-02	0.11
	N_2O	2.2	4.66E-02	0.11
	Greenhouse Gas Equivalent(CO_2e)	-	2,556	6,007

Gerdau Ameristeel US, Inc.
Source 57-0189-11 Post Process Heating Operation
Potential Emissions

Hazardous Air Pollutants (HAPs)	2-Methylnaphthalene	2.40E-05	5.08E-07	1.19E-06
	3-Methylcholanthrene	1.80E-06	3.81E-08	8.96E-08
	7,12-Dimethylbenz(a)anthracene	1.60E-05	3.39E-07	7.96E-07
	Acenapththene	1.80E-06	3.81E-08	8.96E-08
	Acenaphthylene	1.80E-06	3.81E-08	8.96E-08
	Anthracene	2.40E-06	5.08E-08	1.19E-07
	Benz(a)anthracene	1.80E-06	3.81E-08	8.96E-08
	Benzene	2.10E-03	4.45E-05	1.05E-04
	Benzo(a)pyrene	1.20E-06	2.54E-08	5.97E-08
	Benzo(b)fluoranthene	1.80E-06	3.81E-08	8.96E-08
	Benzo(g,h,i)perylene	1.20E-06	2.54E-08	5.97E-08
	Benzo(k)fluoranthene	1.80E-06	3.81E-08	8.96E-08
	Chrysene	1.80E-06	3.81E-08	8.96E-08
	Dibenzo(a,h)anthracene	1.20E-06	2.54E-08	5.97E-08
	Dichlorobenzene	1.20E-03	2.54E-05	5.97E-05
	Fluoranthene	3.00E-06	6.35E-08	1.49E-07
	Fluorene	2.80E-06	5.93E-08	1.39E-07
	Formaldehyde	0.08	1.59E-03	3.73E-03
	Hexane	1.80	3.81E-02	0.09
	Indeno(1,2,3-cd)pyrene	1.80E-06	3.81E-08	8.96E-08
	Naphthalene	6.10E-04	1.29E-05	3.04E-05
	Phenanathrene	1.70E-05	3.60E-07	8.46E-07
	Pyrene	5.00E-06	1.06E-07	2.49E-07
	Toluene	3.40E-03	7.20E-05	1.69E-04
	Arsenic	2.00E-04	4.24E-06	9.95E-06
	Beryllium	1.20E-05	2.54E-07	5.97E-07
	Cadmium	1.10E-03	2.33E-05	5.47E-05
	Chromium	1.40E-03	2.96E-05	6.97E-05
	Cobalt	8.40E-05	1.78E-06	4.18E-06
	Manganese	3.80E-04	8.05E-06	1.89E-05
	Mercury	2.60E-04	5.51E-06	1.29E-05
	Nickel	2.10E-03	4.45E-05	1.05E-04
	Selenium	2.40E-05	5.08E-07	1.19E-06
	Total HAPs	1.89	4.00E-02	0.09

Notes:

2. Emission factors obtained from AP-42, 5th Edition, Volume I, Section 1.4: Natural Gas Combustion, Table 1.4-1: Emssion Factors for Nitrogen Oxides (NOx) and Carbon Monoxide (CO) from Natural Gas Combustion, Table 1.4-2: Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion, and Table 1.4-3: Emission Factors for Speciated Organic Compounds from Natural Gas Combustion.
3. GHG equivalent factors from 40 CFR Part 98, Table A-1.