APPLICATION FOR
TITLE V AIR OPERATING PERMIT RENEWAL
GERDAU AMERISTEEL
JACKSONVILLE MILL

Prepared for:

Gerdau Ameristeel
16770 Rebar Road
Baldwin, FL 32234

Prepared By:

Golder Associates Inc.
6241 NW 23rd Street, Suite 500
Gainesville, Florida 32653-1500

February 2004
0337590

DISTRIBUTION:
4 Copies - FDEP
2 Copies – Gerdau Ameristeel
2 Copies - Golder Associates Inc.

Department of Environmental Protection

Division of Air Resource Management

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MAR 01 2004
BUREAU OF AIR REGULATION

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit for a proposed project:

- subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

Air Operation Permit – Use this form to apply for:

- an initial federally enforceable state air operation permit (FESOP); or
- an initial/revised/renewal Title V air operation permit.

Air Construction Permit & Revised/Renewal Title V Air Operation Permit (Concurrent Processing Option) – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: **Gerdau Ameristeel**
2. Site Name: **Jacksonville Steel Mill**
3. Facility Identification Number: **0310157**
4. Facility Location...:
   Street Address or Other Locator: **16770 Rebar Road**
   City: **Baldwin** County: **Duval** Zip Code: **32234**
5. Relocatable Facility? ☐ Yes ☒ No
6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

1. Application Contact Name: **James P. Wold, Environmental Specialist**
2. Application Contact Mailing Address:
   Organization/Firm: **Gerdau Ameristeel**
   Street Address: **16770 Rebur Road**
   City: **Baldwin** State: **FL** Zip Code: **32234**
3. Application Contact Telephone Numbers...
   Telephone: **(904) 226-4261** ext.**133** Fax: **(904) 266-2996**
4. Application Contact Email Address: **jwold@gerdauameristeel.com**

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	3/1/04
2. Project Number(s):	0310157-006-AV
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

APPLICATION INFORMATION

Purpose of Application

This application for air permit is submitted to obtain: (Check one)

Air Construction Permit

☐ Air construction permit.

Air Operation Permit

☐ Initial Title V air operation permit.

☐ Title V air operation permit revision.

☒ Title V air operation permit renewal.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

☐ Air construction permit and Title V permit revision, incorporating the proposed project.

☐ Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

☐ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

The current Title V Air Operating Permit is No. 0310157-002-AV.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
001	Electric Arc Furnace		NA
002	Billet Reheat Furnace		NA
003	Slag Processing Operation		NA
004	Melt Shop Building		NA

Application Processing Fee

Check one: ☐ Attached - Amount: $_____ ☒ Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name :

2. Owner/Authorized Representative Mailing Address...
   Organization/Firm:
   Street Address:
   City: State: Zip Code:

3. Owner/Authorized Representative Telephone Numbers...
   Telephone: ( ) - ext. Fax: ( ) -

4. Owner/Authorized Representative Email Address:

5. Owner/Authorized Representative Statement:

   I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.

   _____ _____

   Signature Date

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name:
   Donald R. Shumake, Vice President/General Manager

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):
   - ☒ For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.
   - ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.
   - ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.
   - ☐ The designated representative at an Acid Rain source.

3. Application Responsible Official Mailing Address...
   Organization/Firm: **Gerdau Ameristeel**
   Street Address: **16770 Rebar Road**
   City: **Baldwin** State: **Florida** Zip Code: **32234**

4. Application Responsible Official Telephone Numbers...
   Telephone: **(904) 226-4261** ext.**100** Fax: **(904) 266-4244**

5. Application Responsible Official Email Address: **shumake@gerdauameristeel.com**

6. Application Responsible Official Certification:

   I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

Donald R. Shumake — Signature

2-27-04 — Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **Kennard F. Kosky**
   Registration Number: **14996**
2. Professional Engineer Mailing Address...
   Organization/Firm: **Golder Associates Inc.****
   Street Address: **6241 NW 23rd Street, Suite 500**
   City: **Gainesville** State: **FL** Zip Code: **32653-1500**
3. Professional Engineer Telephone Numbers...
   Telephone: **(352) 336-5600** ext. Fax: **(352) 336-6603**
4. Professional Engineer Email Address: **KKosky@golder.com**
5. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

(3) If the purpose of this application is to obtain a Title V air operation permit (check here ☒, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.

(4) If the purpose of this application is to obtain an air construction permit (check here ☐, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here ☐, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here ☐, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature 2/27/04
Date

(seal)

* Attach any exception to certification statement.

** **Board of Professional Engineers Certificate of Authorization #00001670**

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone **17** East (km) **405.7** North (km) **3,350.2**		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) **30/16/52** Longitude (DD/MM/SS) **81/58/50**	
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **33**	6. Facility SIC(s): **3390**
7. Facility Comment :			

Facility Contact

1. Facility Contact Name: **James P. Wold, Environmental Specialist**
2. Facility Contact Mailing Address... Organization/Firm: **Gerdau Ameristeel** Street Address: **16770 Rebar Road** City: **Baldwin** State: **FL** Zip Code: **32234**
3. Facility Contact Telephone Numbers: Telephone: **(904) 226-4261** ext.**133** Fax: **(904) 266-2996**
4. Facility Contact Email Address: **wold@gerdauameristeel.com**

Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I. that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name: **Donald R. Shumake, Vice President/General Manager**
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: **Gerdau Ameristeel** Street Address: **16770 Rebar Road** City: **Baldwin** State: **FL** Zip Code: **32234**
3. Facility Primary Responsible Official Telephone Numbers... elephone: **(904) 226-4261** ext.**100** Fax: **(904) 266-4244**
4. Facility Primary Responsible Official Email Address: **shumake@gerdauameristeel.com**

FACILITY INFORMATION

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1. ☐ Small Business Stationary Source	☐ Unknown
2. ☐ Synthetic Non-Title V Source	
3. ☒ Title V Source	
4. ☐ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. ☐ Major Source of Hazardous Air Pollutants (HAPs)	
7. ☐ Synthetic Minor Source of HAPs	
8. ☒ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. ☐ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
NO_x	A	N
CO	A	N
VOC	A	N
PM	A	N
PM10	A	N
Lead	A	N

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☒ Attached, Document ID: **GA-FI-C1** ☐ Previously Submitted, Date:____
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☒ Attached, Document ID:**GA-FI-C2** ☐ Previously Submitted, Date:____
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☒ Attached, Document ID:**GA-FI-C3** ☐ Previously Submitted, Date:____

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location: ☐ Attached, Document ID:____ ☒ Not Applicable (existing permitted facility)
2. Description of Proposed Construction or Modification: ☐ Attached, Document ID:____
3. Rule Applicability Analysis: ☐ Attached, Document ID:____
4. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification (Rule 62-212.400(2), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable
6. Preconstruction Air Quality Monitoring and Analysis (Rule 62-212.400(5)(f), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable
7. Ambient Impact Analysis (Rule 62-212.400(5)(d), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(5)(h)5., F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(5)(e)1. and 62-212.500(4)(e), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable

FACILITY INFORMATION

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):
   ☐ Attached, Document ID:____ ☒ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities (Required for initial/renewal applications only):
   ☒ Attached, Document ID: **GA-F1-C4** ☐ Not Applicable (revision application)

2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought):
   ☒ Attached, Document ID:**GA-F1-C5**
   ☐ Not Applicable (revision application with no change in applicable requirements)

3. Compliance Report and Plan (Required for all initial/revision/renewal applications):
   ☒ Attached, Document ID:**GA-F1-C6**
   Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.

4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):
   ☐ Attached, Document ID:____
   ☐ Equipment/Activities On site but Not Required to be Individually Listed
   ☒ Not Applicable

5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only) :
   ☐ Attached, Document ID:____ ☒ Not Applicable

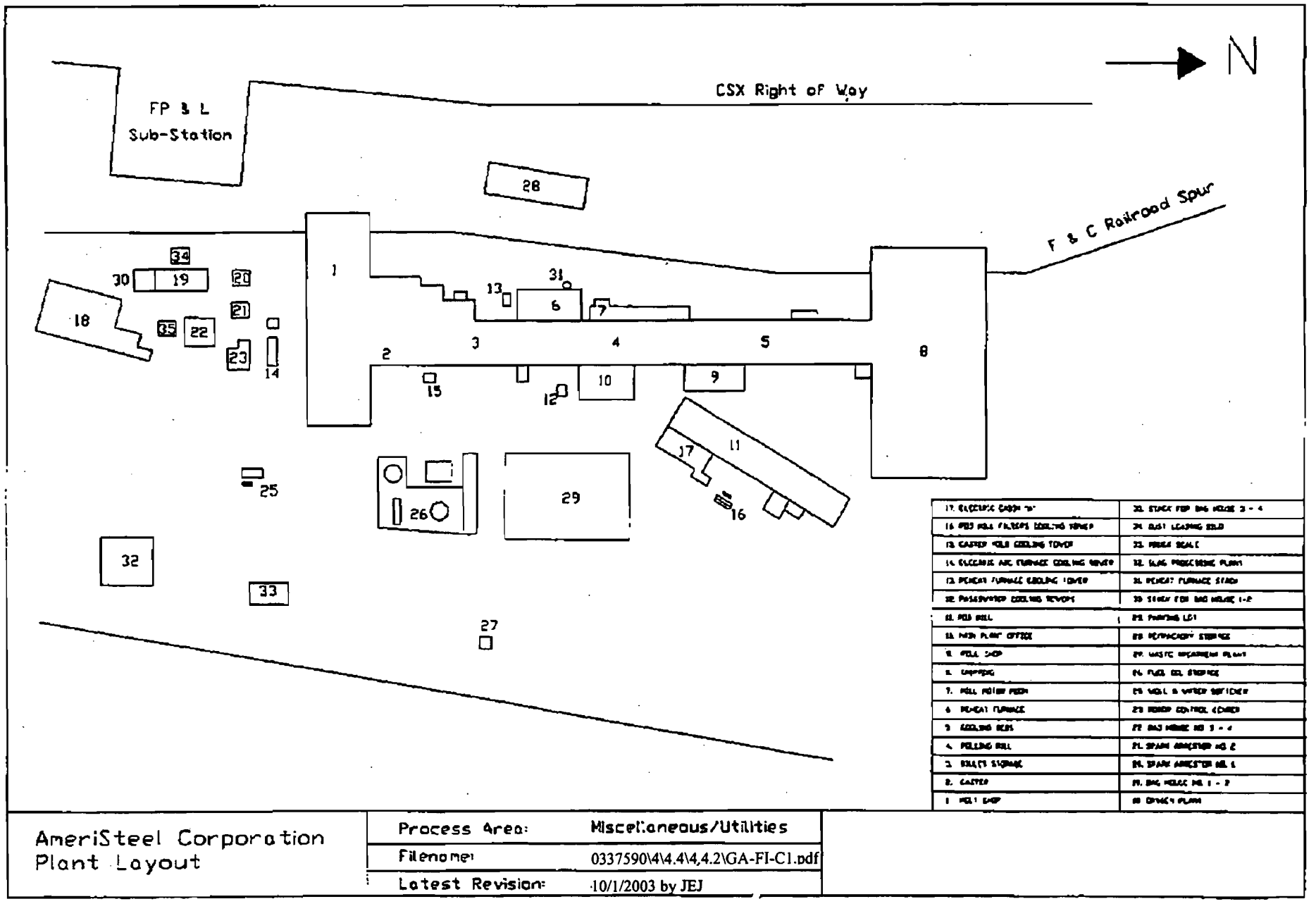
6. Requested Changes to Current Title V Air Operation Permit:
   ☐ Attached, Document ID:____ ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT GA-FI-C1

FACILITY PLOT PLAN

Best Available Copy



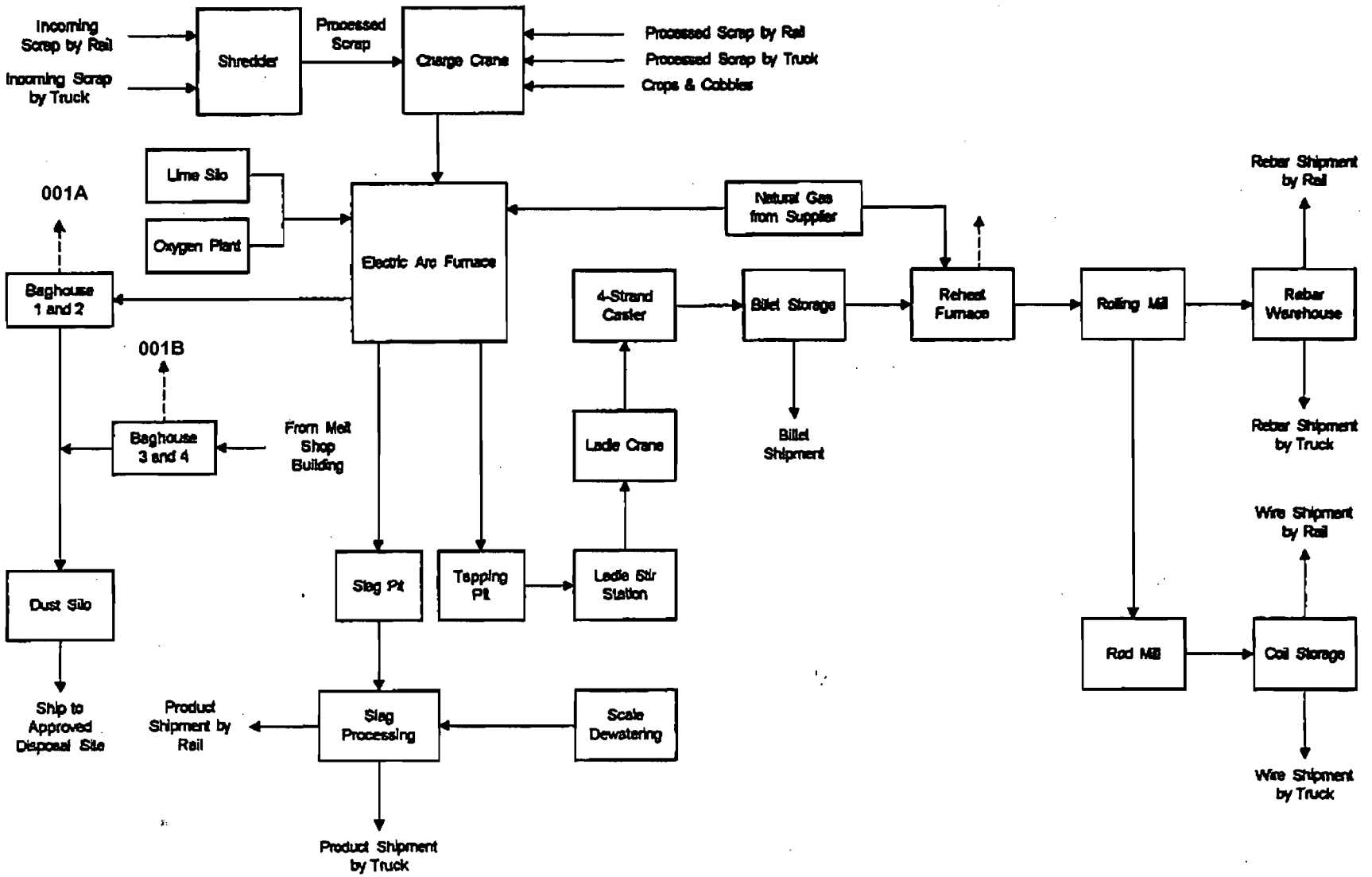
17. ELECTRIC CABIN "A"	35. STACK FOR BAG HOUSE 3 - 4
16. PEC MILL FILTERS COOLING TOWER	34. DUST LOADING SILO
15. CASTER MILL COOLING TOWER	33. FINISH SCALE
14. ELECTRIC ARC FURNACE COOLING TOWER	32. SLAG PROCESSING PLANT
13. PEMCAT FURNACE COOLING TOWER	31. PEMCAT FURNACE STACK
12. PASSIVATED COOLING TOWERS	30. STACK FOR BAG HOUSE 1-2
11. MILL MILL	29. PAINTING LOT
10. MAIN PLANT OFFICE	28. MAINTENANCE STORAGE
9. MILL SHOP	27. WASTE MANAGEMENT PLANT
8. CHARGING	26. FUEL OIL STORAGE
7. MILL WATER POND	25. WELL & WATER SWITCHER
6. PEMCAT FURNACE	24. MONITOR CONTROL (CAMERA)
5. COOLING BEDS	23. BAG HOUSE NO 3 - 4
4. ROLLING MILL	22. SPARK ARRESTOR NO 2
3. BILLET STORAGE	21. SPARK ARRESTOR NO 1
2. CASTER	20. BAG HOUSE NO 1 - 2
1. MELT SHOP	19. OFFICES PLANT

AmeriSteel Corporation
Plant Layout

Process Area:	Miscellaneous/Utilities
Filename:	0337590\4\4.4\4,4.2\GA-FI-C1.pdf
Latest Revision:	10/1/2003 by JEJ

ATTACHMENT GA-FI-C2

PROCESS FLOW DIAGRAM



Attachment GA-FI-C2
Process Flow Diagram
Gerdau Ameristeel – Jacksonville Plant

Source: Golder, 2003.

Process Flow Legend

Solid/Liquid ——→

Gas - - - - - - →

Golder Associates

ATTACHMENT GA-FI-C3

PRECAUTIONS TO PREVENT EMISSIONS OF CONFINED PARTICULATE MATTER

ATTACHMENT GA-FI-C3

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Unconfined particulate matter emissions from yard operations, open stock-piling of materials, and/or materials handling operations shall be controlled by using the following reasonable precautions when visible emissions exceed 20 percent opacity. Reasonable precautions may include, but shall not be limited to, any combination of the following:

1. Reduced speed for vehicular traffic in the plant to 5 miles per hour.
2. Use of liquid resinuous adhesive or other liquid (water) dust suppressants or wetting agents;
3. Use of paving or other asphaltic materials;
4. Removal of particulate matter from paved roads and/or other paved areas by vacuum cleaning or otherwise by wetting prior to sweeping;
5. Covering of trucks, trailers, front-end loaders, and other vehicles or containers to prevent spillage of particulate matter during transport;
6. Use of mulch, hydroseeding, grassing, and/or other vegetative ground cover on barren areas to prevent or reduce particulate matter from being windblown;
7. Use of hoods, fans, filters, land similar to equipment to contain, capture, and vent particulate matter; and
8. Enclosure of covering conveyor systems.

ATTACHMENT GA-F1-C5

LIST OF INSIGNIFICANT ACTIVITIES

Appendix I-1, List of Insignificant Emissions Units and/or Activities.

AmeriSteel Corporation
Baldwin Mill

FINAL Permit No.: 0310157-002-AV
Facility ID No.: 0310157

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), FAC, Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, FAC; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), FAC, shall not be exempt from the permitting requirements of Chapter 62-213, FAC, if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), FAC. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), FAC, if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), FAC.

Brief Description of Emissions Units and / or Activities

1. Scrap Receiving
2. Rolling Mill
3. Rod Mill
4. Cooling Towers
5. Petroleum Products Storage Tanks
6. Water Treatment Plant
7. Lime Silo
8. Parts Washers
9. Welding, Brazing, and Soldering
10. Air Compressors
11. Scrap Cutting/Burning

[electronic file name: 0310157g.fin]

ATTACHMENT GA-F1-C5

IDENTIFICATION OF APPLICABLE REQUIREMENTS

NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Mr. Donnie Shumake
Vice President and General Manager
AmeriSteel Corporation
P.O. Box 518
Baldwin, FL 32234

FINAL Permit No.: 0310157-002-AV
Baldwin Mill

Enclosed is FINAL Permit Number 0310157-002-AV for the operation of the Baldwin Mill located at Hwy 217/Yellow Water Road, Baldwin, Duval County, FL issued pursuant to Chapter 403, Florida Statutes (FS).

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, FS, by the filing of a Notice of Appeal pursuant to Rule 9.110 of the Florida Rules of Appellate Procedure, with the Clerk of the permitting authority in the Legal Office and with the Clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the permitting authority.

Executed in Jacksonville, FL

Regulatory & Environmental Services Department
Air & Water Quality Division

James L. Manning, P.E.
Chief

JLM/RR/rt

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) and all copies were sent by certified mail before the close of business on _____ to the person(s) listed:

Mr. Donnie Shumake, Vice President and General Manager, AmeriSteel Corporation

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this NOTICE OF FINAL PERMIT (including the FINAL permit) were sent by U.S. mail or Internet E-mail on the same date to the person(s) listed:

Mr. Kennard F. Kosky, P.E., Golder Associates, Inc.
Mr. David S. Dee, Landers & Parsons, P.A.
Mr. Scott Sheplak, P.E., Bureau of Air Regulation, DEP/Talla (Internet E-mail)
Mr. Christopher L. Kirts, P.E., District Air Program Administrator, DEP/NED
Mr. Gregg Worley, EPA, Region IV (Internet E-mail memorandum)
Ms. Elizabeth Bartlett, EPA, Region IV (Internet E-mail memorandum)
Mr. Gregory Radlinski, OGC, Environmental Law Section

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency Clerk, receipt of which is hereby acknowledged.

_____ _____
(Clerk) (Date)

[electronic file name: 0310157n.fin]

STATEMENT OF BASIS

AmeriSteel Corporation
Baldwin Mill
Facility ID No.: 0310157
Duval County

Initial Title V Air Operation Permit
FINAL Permit No.: 0310157-002-AV

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (FS), and Florida Administrative Code (FAC) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

This facility consists of a scrap steel recycling operation producing steel reinforcing bars and rods. Major components of this facility are a melt shop building, electric arc furnace, ladle metallurgy furnace, continuous caster, billet reheat furnace, rolling mill, and slag processing.

E.U. ID No.	Brief Description
001	Electric Arc Furnace
002	Billet Reheat Furnace
003	Slag Processing Operation
004	Melt Shop Building

Also included in this permit are miscellaneous insignificant emissions units and/or activities.

Based on the initial Title V permit application received June 18, 1996, this facility is not a major source of hazardous air pollutants (HAPs).

AmeriSteel Corporation
Baldwin Mill
Facility ID No.: 0310157
Duval County

Initial Title V Air Operation Permit
FINAL Permit No.: 0310157-002-AV

PERMITTING & COMPLIANCE AUTHORITY:
REGULATORY & ENVIRONMENTAL SERVICES DEPARTMENT
AIR & WATER QUALITY DIVISION
117 WEST DUVAL STREET, SUITE 225
JACKSONVILLE, FL 32202
TELEPHONE: (904) 630-4900
FAX: (904) 630-3638

[electronic file name0310157f.fin]

Initial Title V Air Operation Permit
FINAL Permit No.: 0310157-002-AV

Table of Contents

Permittee:
AmeriSteel Corporation
P.O. Box 518
Baldwin, FL 32234

FINAL Permit No.: 0310157-002-AV
Facility ID No.: 0310157
SIC Nos.: 33
Project: Initial Title V Air Operation Permit

This permit is for the operation of the Baldwin Mill. This facility is located Hwy 217/Yellow Water Road, Baldwin, Duval County, FL; UTM Coordinates: Zone 17, 405.7 km East and 3350.2 km North; Latitude: 30° 16' 52" North and Longitude: 81° 58' 50" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (FS) and Florida Administrative Code (FAC) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix SS-1, Stack Sampling Facilities
Appendix TV-3, Title V Conditions
Permit 0310157-004-AC (PSD-FL-261) issued September 28, 1999

Effective Date: July 27, 2000
Renewal Application Due Date: March 1, 2004
Expiration Date: September 30, 2004

Regulatory & Environmental Services Department
Air & Water Quality Division

James L. Manning, P.E.
Chief

JLM/RR/rt

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of a scrap steel recycling operation producing steel reinforcing bars and rods. Major components of this facility are a melt shop building, electric arc furnace, ladle metallurgy furnace, continuous caster, billet reheat furnace, rolling mill, and slag processing.

Also included in this permit are miscellaneous insignificant emissions units and/or activities.

Based on the initial Title V permit application received June 18, 1996, this facility is not a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U. ID No.	Brief Description
001	Electric Arc Furnace
002	Billet Reheat Furnace
003	Slag Processing Operation
004	Melt Shop Building

Note: Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:
Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History / ID Number Changes
Appendix LR-1, Local Rule Index

These documents are on file with permitting authority:
Initial Title V Permit Application received June 18, 1996
Supplement to Title V Application received September 22, 1997
AmeriSteel Corporation Comments received December 8, 1999
Permit No. 0310157-004-AC (PSD-FL-261) Amendment received January 31, 2000
AmeriSteel Corporation Comments received April 26, 2000

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. Appendix TV-3, Title V Conditions, is a part of this permit.{Permitting note: Appendix TV-3, Title V Conditions, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}

2. General Particulate Emission Limiting Standards. General Visible Emissions Standard.
Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity) in accordance with Rule 62-296.320(4)(b)1., FAC, and Rule 2.1001, JEPB. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, FAC, and Rule 2.1101, JEPB. Testing shall be required upon request of the Department.

3. Prevention of Accidental Releases (Section 112(r) of CAA).
   a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable; and
   b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), FAC.

   [40 CFR 68.]

4. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload, or use in any installation, VOC or OS without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), FAC, and Rule 2.1001, JEPB.]

5. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), FAC, and Rules 2.501 and 2.1301, JEPB.]

6. Unconfined particulate matter emissions from yard operations, open stock piling of materials and /or materials handling operations shall be controlled by using the following reasonable precautions.

   - Reduced speed for vehicular traffic.
   - Use of liquid resinous adhesives or other liquid dust suppressants or wetting agents.
   - Use of paving or other asphaltic materials.
   - Removal of particulate matter from paved roads and/or other paved areas by vacuum cleaning or otherwise by wetting prior to sweeping.
   - Covering of trucks, trailers, front end loaders, and other vehicles or containers to prevent spillage of particulate matter during transport.
   - Use of mulch, hydro seeding, grassing, and/or other vegetative ground cover on barren areas to prevent or reduce particulate matter from being windblown.
   - Use of hoods, fans, filters, and similar equipment to contain, capture, and vent particulate matter.
   - Enclosures or covering of conveyor systems.

[Rule 62-296.320(4)(c)2., FAC, and Rule 2.1001, JEPB.]

7. Permittee shall notify the Air and Water Quality Division (Department) fifteen (15) days prior to Emissions Unit testing.
[Rule 62-297.310(7)(a)9., FAC, and Rule 2.1101, JEPB.]

8. An Operation and Maintenance Plan shall be part of this permit. All activities shall be performed as scheduled and recorded. Data shall be made available to the Department upon request. Records shall be maintained on file for a minimum period of five (5) years.

9. Control equipment shall be provided with a method of access that is safe and readily accessible. [Rule 62-297.310(6), FAC, and Rule 2.1101, JEPB.]

10. Testing of emissions shall be conducted with the Emissions Unit operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then Emissions Units may be tested at less capacity; in this case subsequent Emissions Unit operation is limited to 110 percent of the test load until a new test is conducted. Once the Emissions Unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit.
[Rule 62-297.310(2), FAC, and Rule 2.1101, JEPB.]

11. Copies of the test report(s) shall be submitted to the Department within forty-five (45) days of completion of testing.
[Rule 62-297.310(8)(b), FAC, and Rule 2.1101, JEPB.]

12. When appropriate, any recording, monitoring or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, FAC and Rule 2.501, JEPB.]

13. The **Annual Statement of Compliance** required by 40 CFR 70.6, Rule 62-213.440(3), FAC and Rule 2.501, JEPB shall be due on or before March 1 each year covering the period for the previous calendar year.
{See Condition No. 51, Appendix TV-3, Title V Conditions}
[40 CFR 70.6, Rule 62-213.440, FAC and Rule 2.501, JEPB]

14. Excess emissions resulting from startup, shutdown, or malfunction of any emission unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Permitting Authority in accordance with Rule 62-4.130, FAC and Rule 2.1301, JEPB. A full written report on the malfunctions shall be submitted to the Permitting Authority in a quarterly report, if requested by the Permitting Authority.
[Rule 62-210.700, FAC, and Rule 2.201, JEPB]

15. The permittee shall submit all compliance related notifications and reports required of this permit to:

Regulatory and Environmental Services Department
Air and Water Quality Division
117 West Duval Street, Suite 225
Jacksonville, FL 32202
Telephone: 904/630-4900
Fax: 904/630-3638

16. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency should be sent to:

United States Environmental Protection Agency
Region 4
Air & EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, GA 30303
Telephone: 404/562-9055
Fax: 404/562-9164

The following Facility-wide conditions are not federally enforceable

17. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), FAC, and Rule 2.1001, JEPB.]

18. The facility shall be subject to the City of Jacksonville Ordinance Code, Title X, Chapter 360 [Environmental Regulation], Chapter 362 [Air and Water Pollution], Chapter 376 [Odor Control], and JEPB Rule 1 [Final Rules with Respect to Organization, Procedure, and Practice].

19. The facility shall be subject to JEPB Rule 2, Parts I through VII, and Parts IX through XIII.

Section III. Emissions Unit(s) and Conditions.

Emissions Unit No. 001 – Electric Arc Furnace

Emissions Unit Description – An electric arc furnace (EAF) for processing recycled scrap-based steel. The EAF is housed in the melt shop including a Ladle Metallurgy Furnace (LMF) and the continuous caster. PM emissions from the lime storage and handling system, and the baghouse dust storage and handling system are vented and captured by the melt shop emissions control system.

Control Device - Baghouses No. 1-2 and No. 3-4

Essential Potential to Emit (PTE) Parameters

1. The maximum heat input shall not exceed the following:
   a. EAF - 81.6 x 10^6 Btu per hour firing natural gas or propane.
   b. LMF - 222.0 x 10^6 Btu per hour firing natural gas or propane.

2. Steel production shall not exceed any of the following:
   a. 100 billet tons of steel per hour, maximum daily average.
   b. 90 billet tons of steel per hour, maximum monthly average.
   c. 720,000 billet tons of steel per year.

3. Raw materials (scrap steel, fluxes, alloys, etc.) to the EAF shall not exceed 110 tons per hour.

4. The maximum allowable process rate of the EAF baghouse dust handling system shall not exceed the following:
   a. 3 tons per hour to the dust accumulation silo.
   b. 100 tons per hour during truck/railcar loading.

5. The hours of operation for this emissions unit shall not exceed the following:
   a. EAF - 8,000 hours per year.
   b. LMF - 8,500 hours per year.

Emission Limitations and Standards

6. Particulate matter (PM/PM_{10}) emissions shall be limited to 0.0042 grain per dry standard cubic foot, (first annual compliance test); thereafter 0.0034 grain per dry standard cubic foot.
   [40 CFR 60.275a(e)(2), Rule 62-212.400(5), FAC, and Rule 2.401, JEPB.]

7. Visible emissions (VE) from the control device shall be limited to 3 percent opacity.
   [40 CFR 60.272a, Rule 62-212.400(5), FAC, and Rule 2.401, JEPB.]

8. Carbon monoxide (CO) emissions shall be limited to 3.0 pounds per ton of steel, 300.0 pounds per hour (24-hour average), and 1,080.0 tons per year.
   [Rule 62-212.400(5), FAC, and Rule 2.401, JEPB.]

9. Nitrogen oxides (NO_x) emissions shall be limited to 0.33 pound per ton of steel, 33.0 pounds per hour, and 118.8 tons per year.
   [Rule 62-212.400(5), FAC, and Rule 2.401, JEPB.]

10. Volatile organic compounds (VOC) emissions shall be limited to 0.295 pound per ton of steel, 29.5 pound per hour, and 106.2 tons per year.
    [Rule 62-212.400(1), FAC, and Rule 2.401, JEPB.]

11. Lead emissions shall be limited to 0.70 pound per hour, 2.8 tons per year.
    [Rule 62-212.400(1), FAC, and Rule 2.401, JEPB.]

12. 40 CFR 60, Subpart AAa, Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels, and 40 CFR 60, Subpart A, General Provisions, Reporting Requirements, Notification Requirements, and Standards of Performance shall apply to the source described herein. [Rule 62-204.800, FAC, and Rule 2.201, JEPB.]

13. VE from any part of the system handling the dust captured by baghouses No. 1-2 and No.3-4 shall not exceed 10 percent opacity.
[Rule 62-212.400(5), FAC, and Rule 2.401, JEPB.]

Test Methods and Procedures

14. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method (RM) 5 (as described in 40 CFR 60, Appendix A) for particulate matter.
[40 CFR 60.275(e)(1), Rule 62-297.310, FAC, and Rule 2.1101, JEPB.]

15. Testing for demonstration of compliance shall be performed concurrently with PM test in accordance with EPA RM 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity. [40 CFR 60.275(e)(4), Rule 62-297.310, FAC, and Rule 2.1101, JEPB.]

16. Testing for demonstration of compliance shall be performed in accordance with EPA RM 10 (as described in 40 CFR 60, Appendix A) for carbon monoxide (24-hour average).
[Rule 62-297.310, FAC, and Rule 2.1101, JEPB.]

17. Testing for demonstration of compliance shall be performed in accordance with EPA RM 7E (as described in 40 CFR 60, Appendix A) for nitrogen oxides (as measured).
[Rule 62-297.310, FAC, and Rule 2.1101, JEPB.]

18. Testing for demonstration of compliance shall be performed in accordance with EPA RM 18, 25, or 25A (as described in 40 CFR 60, Appendix A) for volatile organic compounds.
[Rule 62-297.310, FAC, and Rule 2.1101, JEPB.]

19. Testing for demonstration of compliance shall be performed in accordance with EPA RM 12 (as described in 40 CFR 60, Appendix A) for lead.
[Rule 62-297.310, FAC, and Rule 2.1101, JEPB.]

20. Testing shall be performed at a minimum production rate of 90 billet tons per hour annually from the date of March 1, 1999.

Continuous Monitoring Requirements

21. Continuous monitoring systems for the measurement of opacity from baghouses No.1-2 and No. 3-4 shall be installed, calibrated, maintained and operated in accordance with 40 CFR 60.273a(a).
[40 CFR 60, Appendix B, Rule 62-204.800(7), FAC, and Rule 2.201, JEPB.]

Recordkeeping and Reporting Requirements

22. Reports and recordkeeping shall be in accordance with the provisions of 40 CFR 60.276a. [Rule 62-204.800(7), FAC, and Rule 2.201, JEPB.]

23. The permittee shall monitor and maintain records of the following information at least once per shift during normal operations and at least every 15 minutes during compliance tests.
    a. Static pressure inside the EAF system or 6-minute, once per day, visual emissions (EPA RM 9) on the EAF building during melt down or refining operations as provided in 40 CFR 60.273a as revised on May 3, 1999.
    b. Baghouse No.1-2 and baghouse No. 3-4 fan motor amperage and all roof and canopy hood damper positions or continuously monitor the volumetric flow rate through each separately ducted hood.
    c. A monthly operational status inspection shall be performed on the air pollution system (baghouses, hoods, ducts, instruments) that control the melt shop and any deficiencies noted corrected promptly.

    [40 CFR 60.274a(b), Rule 62-204.800, FAC, and Rule 2.201, JEPB.]

24. Records shall be maintained for a minimum of five (5) years and made available to the Department upon request.

Emissions Unit No. 002 – Billet Reheat Furnace

Emissions Unit Description – Reheat steel billets for rolling into reinforcing bars and rods.

Essential Potential to Emit (PTE) Parameters

1. The maximum heat input shall be limited to 222.0 x 10^6 Btu per hour firing natural gas or propane.

2. Steel production shall not exceed any of the following:
    a. 120 billet tons of steel per hour (maximum daily average).
    b. 720,000 billet tons of steel per year.

3. The hours of operation for this emissions unit shall not exceed 8,500 hours per year.

Emission Limitations and Standards

4. PM emissions shall be limited to 2.4 pounds per hour, and 10.2 tons per year. [Rule 62-212.400(5), FAC, and Rule 2.401, JEPB.]

5. VE shall be limited to 15 percent opacity. [Rule 62-212.400(5), FAC, and Rule 2.401, JEPB.]

6. CO emissions shall be limited to 0.035 pound per 10^6 Btu, 7.7 pounds per hour, and 33.0 tons per year. [Rule 62-212.400(5), FAC, and Rule 2.401, JEPB.]

7. NO_x emissions shall be limited to 0.19 pound per 10^6 Btu, and 179.3 tons per year. [Rule 62-212.400(5), FAC, and Rule 2.401, JEPB.]

Test Methods and Procedures

8. Testing for demonstration of compliance shall be performed in accordance with EPA RM 5 (as described in 40 CFR 60, Appendix A) for particulate matter. [Rule 62-297.310, FAC, and Rule 2.1101, JEPB.]

9. Testing for demonstration of compliance shall be performed concurrently with PM test in accordance with EPA RM 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity. [40 CFR 60.275(e), Rule 62-297.310, FAC, and Rule 2.1101, JEPB.]

10. Testing for demonstration of compliance shall be performed in accordance with EPA RM 10 (as described in 40 CFR 60, Appendix A) for carbon monoxide. [Rule 62-297.310, FAC, and Rule 2.1101, JEPB.]

11. Testing for demonstration of compliance shall be performed in accordance with EPA RM 7E (as described in 40 CFR 60, Appendix A) for nitrogen oxides. [Rule 62-297.310, FAC, and Rule 2.1101, JEPB.]

12. Testing shall be performed at a minimum production rate of 108 billet tons per hour annually from the date of March 1, 1999.

Recordkeeping and Reporting Requirements

13. Monthly records shall be maintained for the following:
    a. Billet tons of steel produced.
    b. Hours of operation.

    [Rule 62-212.400(5), FAC, and Rule 2.401, JEPB.]

14. Records shall be maintained for a minimum of five (5) years and made available to the Department upon request.

Emissions Unit No. 003 – Slag Processing Operation

Emissions Unit Description – The steel slag recycling process includes screening, crushing, and sizing operations. Iron rich scrap is recycled for steel production with the remaining slag sold as construction aggregate.

Essential Potential to Emit (PTE) Parameters

1. The maximum slag production/processing shall not exceed 100.0 tons per hour, 500.0 tons per day, and 85,000 tons per year.

2. The hours of operation for this emissions unit shall not exceed 2,000 hours per year.

Emission Limitations and Standards

3. Unconfined PM emissions shall be controlled by using reasonable precautions.
[Rule 62-296.320(4)(c), FAC, and Rule 2.1001, JEPB.]

Recordkeeping and Reporting Requirements

4. Monthly records shall be maintained for the following:
   a. Tons of slag processed.
   b. Hours of operation.
[Rule 62-4.070(3), FAC, and Rule 2.1301, JEPB.]

5. Records shall be maintained for a minimum of five (5) years and made available to the Department upon request.

Emissions Unit No. 004 – Melt Shop Building

Emissions Unit Description – The melt shop houses the EAF, LMF, and continuous caster.

Essential Potential to Emit (PTE) Parameters

1. The hours of operation for this emissions unit shall not exceed 8,500 hours per year.

Emission Limitations and Standards

2. VE from any opening in the melt shop building shall not exceed 6 percent opacity.
[40 CFR 60.272a, Rule 62-212.400(5), FAC, and Rule 2.401, JEPB.]

3. 40 CFR 60, Subpart AAa, Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels, and 40 CFR 60, Subpart A, General Provisions, Reporting Requirements, Notification Requirements, and Standards of Performance shall apply to the source described herein.

Test Methods and Procedures

4. Testing for demonstration of compliance shall be performed in accordance with EPA RM 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity.
[40 CFR 60.275(e), Rule 62-297.310, FAC, and Rule 2.1101, JEPB.]

5. Testing shall be performed annually from the date of March 1, 1999.

Appendix I-1, List of Insignificant Emissions Units and/or Activities.

AmeriSteel Corporation
Baldwin Mill

FINAL Permit No.: 0310157-002-AV
Facility ID No.: 0310157

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), FAC, Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, FAC; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), FAC, shall not be exempt from the permitting requirements of Chapter 62-213, FAC, if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), FAC. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), FAC, if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), FAC.

Brief Description of Emissions Units and / or Activities

1. Scrap Receiving
2. Rolling Mill
3. Rod Mill
4. Cooling Towers
5. Petroleum Products Storage Tanks
6. Water Treatment Plant
7. Lime Silo
8. Parts Washers
9. Welding, Brazing, and Soldering
10. Air Compressors
11. Scrap Cutting/Burning

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Appendix H-1, Permit History/ID Number Changes

AmeriSteel Corporation
Baldwin Mill

FINAL Permit No.: 0310157-002-AV
Facility ID No.: 0310157

Permit History (for tracking purposes):

E.U. ID No.	Description	Permit No.	Issue Date	Expiration Date	Extended Date[1, 2]	Revised Date(s)
001	Electric Arc Furnace	0310157-004-AC (PSD-FL-261)	09/28/99	12/31/00		
002	Billet Reheat Furnace	0310157-004-AC (PSD-FL-261)	09/28/99	12/31/00		
003	Slag Processing Operation	0310157-004-AC (PSD-FL-261)	09/28/99	12/31/00		
004	Melt Shop Building	0310157-004-AC (PSD-FL-261)	09/28/99	12/31/00		

(if applicable) ID Number Changes (for tracking purposes):

From: **Facility ID No.**: 31DVL160157

To: **Facility ID No.**: 0310157

Notes:
1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., FAC, effective 03/21/96.
2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., FAC, effective 03/20/96.
{Rule 62-213.420(1)(b)2., FAC, allows Title V Sources to operate under existing valid permits that were in effect at the time of application until the Title V permit becomes effective}

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Table 2-1, Summary of Compliance Requirements

AMERISTEEL CORPORATION
BALDWIN MILL

FINAL Permit No.: 0310157-002-AV
Facility ID No.: 0310157

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.
Notes: * The frequency base date is established for planning purposes only; see Rule 62-297.310, FAC
**CMS [=] continuous monitoring system

EU ID No.	Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See permit condition(s)
001	PM/PM_{10}		EPA Method 5	Annually	1-Mar-99			III., EU001, 13. & 19.
	VE		EPA Method 9	Annually	1-Mar-99			III., EU001, 14. & 19.
	CO		EPA Method 10	Annually	1-Mar-99			III., EU001, 15. & 19.
	NO_x		EPA Method 7E	Annually	1-Mar-99			III., EU001, 16. & 19.
	VOC		EPA Method 18, 25, 25A	Annually	1-Mar-99			III., EU001, 17. & 19.
	Pb		EPA Method 12	Annually	1-Mar-99			III., EU001, 18. & 19.
	VE*		EPA Method 9	Annually	1-Mar-99			III., EU001, 13. & 19.
002	PM		EPA Method 5	Annually	1-Mar-99			III., EU002, 8. & 12.
	VE		EPA Method 9	Annually	1-Mar-99			III., EU002, 9. & 12.
	CO		EPA Method 10	Annually	1-Mar-99			III., EU002, 10. & 12.
	NO_x		EPA Method 7E	Annually	1-Mar-99			III., EU002, 11. & 12.
003	PM		Reasonable Precautions					III., EU003, 3.
004	VE		EPA Method 9	Annually	1-Mar-99			III., EU004, 4. & 5.

VE* - Baghouse Dust Handling System

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Table 1-1, Summary of Air Pollutant Standards and Terms

AMERISTEEL CORPORATION
BALDWIN MILL

FINAL PERMIT NO.: 0310157-002-AV
FACILITY ID NO.: 0310157

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.
Note: The "Equivalent Emissions" listed are for informational purposes only.

				Allowable Emissions			Equivalent Emissions*			
Eu ID No.	Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour	TPY	lbs./hour	TPY	Regulatory Citation(s)	See permit condition(s)
001	[1]PM/PM_{10}	Nat. Gas	8000	0.0042 gr/dscf					62-212.400(5), FAC	III., EU001, 6.
	PM/PM_{10}			0.0034 gr/dscf					62-212.400(5), FAC	III., EU001, 6.
	NO_x			0.33 lb/ton Steel	33.00	118.80			62-212.400(5), FAC	III. EU001, 9.
	CO			3.0 lbs/ton Steel	300.00	1080.00			62-212.400(5), FAC	III. EU001, 8.
	VOC			0.295 ib/ton Steel	29.50	106.20			62-212.400(1), FAC	III. EU001, 10.
	VE			3%					62-212.400(5), FAC	III., EU001, 7.
	Pb				0.70	2.80			62-212.400(1), FAC	III., EU001, 11.
	VE*			10%					62-212.400(5), FAC	III., EU001, 13.
002	PM	Nat. Gas	8500		2.40	10.20			62-212.400(5), FAC	III., EU002, 4.
	NO_x			0.19 lb/10^6 Btu		179.30			62-212.400(5), FAC	III. EU002, 7.
	CO			0.035 lb/10^6 Btu	7.70	33.00			62-212.400(5), FAC	III. EU002, 6.
	VE			15%					62-212.400(5), FAC	III., EU002, 5.
003	PM		2000	Reasonable Precautions					62-296.320(4)(c), FAC	III. EU003, 3.
004	VE		8500	6%					62-212.400(5), FAC	III., EU004, 2.

VE* - Baghouse Dust Handling System
Note: 1 First annual compliance test.

Table 1-1, Summary of Air Pollutant Standards and Terms

AMERISTEEL CORPORATION
BALDWIN MILL

FINAL PERMIT NO.: 0310157-002-AV
FACILITY ID NO.: 0310157

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.
Note: The "Equivalent Emissions" listed are for informational purposes only.

				Allowable Emissions			Equivalent Emissions*			
Eu ID No.	Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour	TPY	lbs./hour	TPY	Regulatory Citation(s)	See permit condition(s)

ATTACHMENT GA-F1-C6

COMPLIANCE REPORT

Department of Environmental Protection

Division of Air Resource Management

STATEMENT OF COMPLIANCE - TITLE V SOURCE

REASON FOR SUBMISSION (Check one to indicate why this statement of compliance is being submitted)

☐ Annual Requirement	☐ Transfer of Permit	☐ Permanent Facility Shutdown

REPORTING PERIOD*	REPORT DEADLINE**
January through December of 2003 (year)	March 1, 2004

*The statement of compliance must cover all conditions that were in effect during the indicated reporting period, including any conditions that were added, deleted, or changed through permit revision.

**See Rule 62-213.440(3)(a)2., F.A.C.

Facility Owner/Company Name: Gerdau AmeriSteel

Site Name: Jacksonville Mill Division Facility ID No. 0310157 County: Duval

COMPLIANCE STATEMENT (Check only one of the following three options)

____ **A.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, and there were no reportable incidents of deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above.

____ **B.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part; however, there were one or more reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each incident of deviation, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.

X___ **C.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, EXCEPT those identified in the pages attached to this report and any reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each item of noncompliance, the following information is included:

1. Emissions unit identification number.
2. Specific permit condition number (note whether the permit condition has been added, deleted, or changed during certification period).
3. Description of the requirement of the permit condition.
4. Basis for the determination of noncompliance (for monitored parameters, indicate whether monitoring was continuous, i.e., recorded at least every 15 minutes, or intermittent).
5. Beginning and ending dates of periods of noncompliance.
6. Identification of the probable cause of noncompliance and description of corrective action or preventative measures implemented.
7. Dates of any reports previously submitted identifying this incident of noncompliance.

For each incident of deviation, as described in paragraph **B.** above, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.

STATEMENT OF COMPLIANCE - TITLE V SOURCE

RESPONSIBLE OFFICIAL CERTIFICATION

I, the undersigned, am a responsible official (Title V air permit application or responsible official notification form on file with the Department) of the Title V source for which this document is being submitted. With respect to all matters other than Acid Rain program requirements, I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.

Donald R. Shumake 2-10-04

(Signature of Title V Source Responsible Official) *(Date)*

Name: Donald R. Shumake Title: Vice President & General Manager

DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

I, the undersigned, am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

_____ _____

(Signature of Acid Rain Source Designated Representative) *(Date)*

Name:_____ Title:_____

{Note: Attachments, if required, are created by a responsible official or designated representative, as appropriate, and should consist of the information specified and any supporting records. Additional information may also be attached by a responsible official or designated representative when elaboration is required for clarity. This report is to be submitted to both the compliance authority (DEP district or local air program) and the U.S. Environmental Protection Agency(EPA) (U.S. EPA Region 4, Air and EPCRA Enforcement Branch, 61 Forsyth Street, Atlanta GA 30303).}

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [1] of [4]
Electric Arc Furnace

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

☒ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
Electric Arc Furnace (EAF, Continuous Caster)

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**April 76**	**3390**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: **Fuchs** Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
Meltshop Building houses electric arc furnace and continuous caster; emissions controlled by Baghouse Nos. 1-2, 3-4.

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:
   Baghouse (Fabric filter – medium temperature)
   Baghouse Nos. 1-2, 3-4

2. Control Device or Method Code(s): **017**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **110 TPH (scrap steel)**	
2. Maximum Production Rate: **100 billet TPH**	
3. Maximum Heat Input Rate: **81.6** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**7** days/week **8,000** hours/year
6. Operating Capacity/Schedule Comment: **100 billet tons steel per hour – maximum daily average** **90 billet tons steel per hour – maximum monthly average** **720,000 billet tons of steel per year.**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **001A, 001B**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Emissions from Baghouse Nos. 1-2 and 3-4 that control emissions from EAF, caster, and meltshop.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **115** feet	7. Exit Diameter: **10** feet
8. Exit Temperature: **230**°F	9. Actual Volumetric Flow Rate: **305,540** acfm	10. Water Vapor: **5%**
11. Maximum Dry Standard Flow Rate: **232,000** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Data for Baghouse No. 1-2 is entered in form above.** **Baghouse No. 3-4 data: 115 ft stack height; 10 ft stack diameter; 320,000 acfm; 292,000 dscfm.** 8.5 lb/hr		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Industrial Process, Natural Gas**		
2. Source Classification Code (SCC): **3-90-006-99**	3. SCC Units: **MMCuft**	
4. Maximum Hourly Rate: **0.08**	5. Maximum Annual Rate: **640**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,019**
10. Segment Comment: **Permit No. 0310157-002-AV** **81.6 MMBtu/hr x 8,000 hr/yr = 652,800 MMBtu/yr** **= 640 MMCuft/yr**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Scrap Steel**		
2. Source Classification Code (SCC): **3-03-009-04**	3. SCC Units: **Tons of Raw Material**	
4. Maximum Hourly Rate: **110**	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Raw materials (scrap steel, fluxes, alloys, etc.) to EAF**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	017		EL
PM_{10}	017		EL
CO			EL
NO_x			EL
VOC			EL
Lead (Pb)	017		EL

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control: **99%**
3. Potential Emissions: **15.27** lb/hour **61.1** tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0034 gr/dscf** Reference: **Permit No. 0310157-002-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **0.0034 gr/dscf x (232,000 + 292,000 dscfm) x 60 min/1 hr x 1 lb/7,000 gr = 15.27 lb/hr = 61.1 TPY**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **Total from Baghouse Nos. 1-2, 3-4. Limited to 8,000 hr/yr operation.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0034 gr/dscf**	4. Equivalent Allowable Emissions: **15.27** lb/hour **61.1** tons/year
5. Method of Compliance: **EPA Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Total from Baghouse Nos. 1, 2, 3, and 4. 8,000 hr/yr operation.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control: **99%**
3. Potential Emissions: **15.27** lb/hour **61.1** tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0034 gr/dscf** Reference: **Permit No. 0310157-002-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **0.0034 gr/dscf x (232,000 + 292,000 dscfm) x 60 min/1 hr x 1 lb/7,000 gr = 15.27 lb/hr = 61.1 TPY**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **Total from Baghouse Nos. 1-2, 3-4. Limited to 8,000 hr/yr operation.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0034 gr/dscf**	4. Equivalent Allowable Emissions: **15.27** lb/hour **61.1** tons/year
5. Method of Compliance: **EPA Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Total from Baghouse Nos. 1-2, 3-4. 8,000 hr/yr operation.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **300** lb/hour **1,080** tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **3.0 lb/ton of steel** Reference: **Permit No. 0310157-002-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Permit No. 0310157-002-AV 300 lb/hr; 24-hour average**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **Total from Baghouse Nos. 1-2, 3-4. Limited to 8,000 hr/yr operation.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **30 lb/ton of steel**	4. Equivalent Allowable Emissions: **300** lb/hour **1,080** tons/year
5. Method of Compliance: **EPA Method 10; 24-hour average.**	
6. Allowable Emissions Comment (Description of Operating Method): **Total from Baghouse Nos. 1-2, 3-4. 8,000 hr/yr operation.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **33** lb/hour **118.8** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.33 lb/ton of steel** Reference: **Permit No. 0310157-002-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Limit from Permit No. 0310157-002-AV**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **Total from Baghouse Nos. 1-2, 3-4. Limited to 8,000 hr/yr operation.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **33 lb/hr**	4. Equivalent Allowable Emissions: **33** lb/hour **118.8** tons/year
5. Method of Compliance: **EPA Method 7E.**	
6. Allowable Emissions Comment (Description of Operating Method): **Total from Baghouse Nos. 1-2, 3-4. Permit No. 0310157-002-AV.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **29.5** lb/hour **106.2** tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.295 lb/ton of steel** Reference: **Permit No. 0310157-002-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Permit limit in Permit No. 0310157-002-AV.**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **Total from Baghouse Nos. 1-2, 3-4. Limited to 8,000 hr/yr operation.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.295 lb/ton of steel**	4. Equivalent Allowable Emissions: **29.5** lb/hour **106.2** tons/year
5. Method of Compliance: **EPA Method 18, 25, or 25A.**	
6. Allowable Emissions Comment (Description of Operating Method): **Total from Baghouse Nos. 1-2, 3-4. 8,000 hr/yr operation.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **Lead (Pb)**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.70** lb/hour **2.8** tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions: **Permit Limit in Permit No. 0310157-002-AV.**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **Total from Baghouse Nos. 1-2, 3-4. Limited to 8,000 hr/yr operation.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.70 lb/hr**	4. Equivalent Allowable Emissions: **0.70** lb/hour **2.8** tons/year
5. Method of Compliance: **EPA Method 12.**	
6. Allowable Emissions Comment (Description of Operating Method): **Total from Baghouse Nos. 1-2, 3-4. 8,000 hr/yr operation.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **3**

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **10** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9.**	
5. Visible Emissions Comment: **Dust handling system (dust captured by baghouse) NSPS, 40 CFR 60, Subpart AAa.**	

Visible Emissions Limitation: Visible Emissions Limitation **2** of **3**

1. Visible Emissions Subtype: **VE99**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **Best operational practices.**	
5. Visible Emissions Comment: **Excess emissions for startup, shutdown, malfunction not to exceed 2 hours per 24-hour period. Rule 62-210.700(1) and 40 CFR 60.11(c).**	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **3** of **3**

1. Visible Emissions Subtype: **VE03**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **3** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Continuous Opacity Monitor**	
6. Visible Emissions Comment: **Opacity from the exit of the control device. NSPS, 40 CFR 60, Subpart AAa.**	

Visible Emissions Limitation: Visible Emissions Limitation of

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **6** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor 1 of 2

1. Parameter Code: **VE**	2. Pollutant(s):
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Spectrum** Model Number: **S41-01**	Serial Number: **9935-8003**
5. Installation Date: **06 Oct 2000**	6. Performance Specification Test Date: **12 Dec 2001**
7. Continuous Monitor Comment: **Rule 62-296.800, F.A.C.; 40 CFR 60.273a(b).** **Baghouse 1-2 stack.**	

Continuous Monitoring System: Continuous Monitor 2 of 2

1. Parameter Code: **VE**	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: **Spectrum** Model Number: **S41-01**	Serial Number: **9947-8014**
5. Installation Date: **06 Oct 2000**	6. Performance Specification Test Date: **12 Dec 2001**
7. Continuous Monitor Comment: **Rule 62-296.800, F.A.C.; 40 CFR 60.273a(b).** **Baghouse 3-4 stack.**	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **GA-EU1-C1** ☐ Previously Submitted, Date ____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **GA-EU1-C2** ☐ Previously Submitted, Date ____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **GA-EU1-C3** ☐ Previously Submitted, Date ____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **GA-EU1-C4** ☐ Previously Submitted, Date ____
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **GA-EU1-C4** ☐ Previously Submitted, Date ____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records
   ☒ Attached, Document ID: **GA-EU1-C6**
   Test Date(s)/Pollutant(s) Tested: ____
   ____
   ☐ Previously Submitted, Date: ____
   Test Date(s)/Pollutant(s) Tested: ____
   ____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: ____
   ____
   ☐ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   ☐ Attached, Document ID: ____ ☒ Not Applicable

EMISSIONS UNIT INFORMATION
Section [1] of [4]
Electric Arc Furnace

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☒ Not Applicable

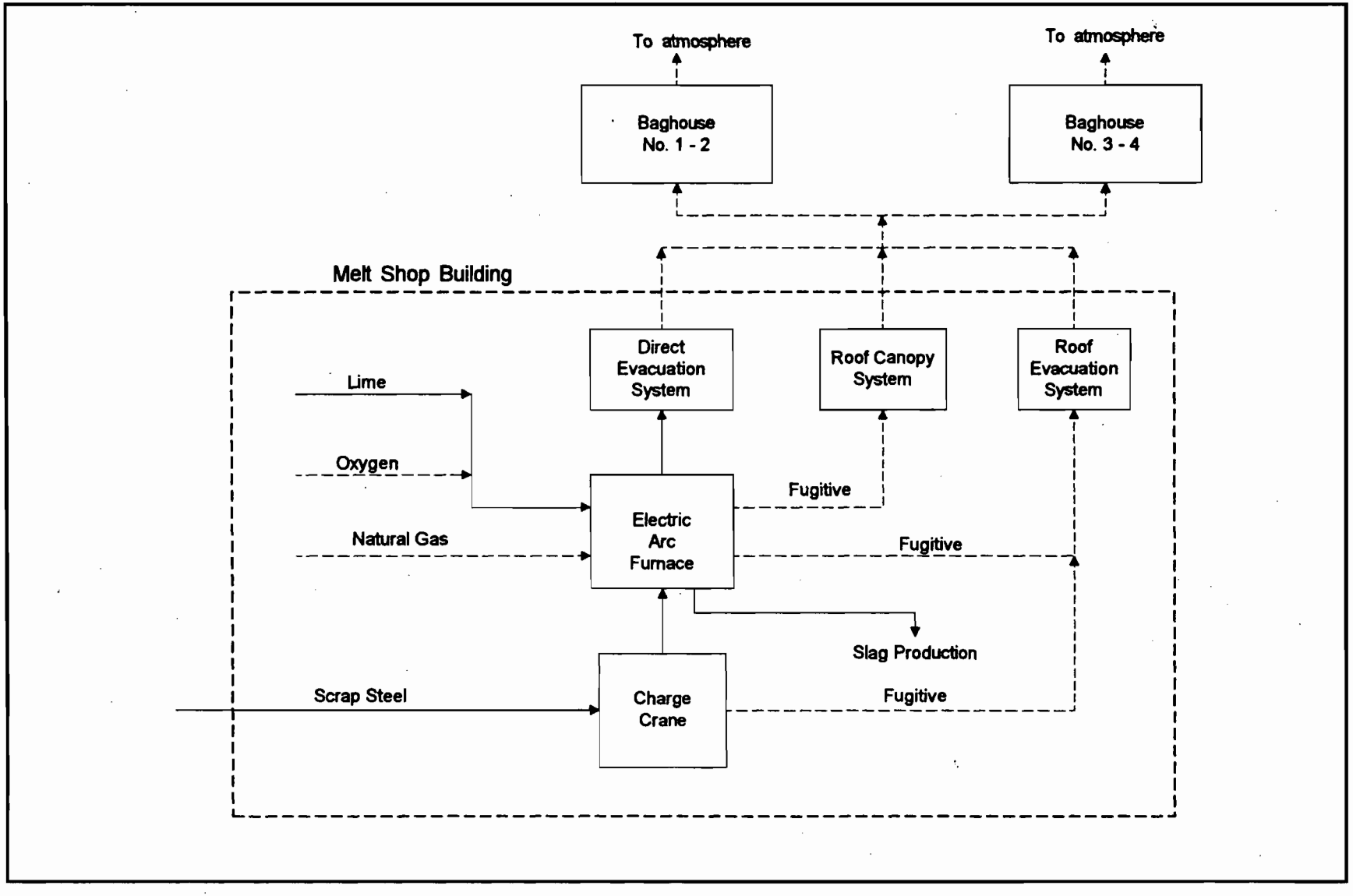
Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **GA-EU1-C7** ☐ Not Applicable
2. Compliance Assurance Monitoring
   ☒ Attached, Document ID: **GA-EU1-C8** ☐ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID: _____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT GA-EU1-C1

PROCESS FLOW DIAGRAM



Attachment Process Flow Diagram AmeriSteel Corporation Jacksonville, FL	**Process Flow Legend** Solid/Liquid ——→ Gas - - - →	Process Area: Melt Shop Building, Electric Arc Furnace, and Continuous Caster Filename: fisteel.vsd Date: April 23, 1996	KBN Engineering and Applied Sciences, Inc.

ATTACHMENT GA-EU1-C2

FUEL ANALYSIS OR SPECIFICATION

ATTACHMENT FS-EU1-L2

FUEL ANALYSIS

Natural gas analysis

Parameter	Typical Value	Max Value
Relative density	0.58 (compared to air)	
heat content	950 - 1124 Btu/cu ft.	
% sulfur	0.43 grains/CCF [1]	1 grain/100 CF
% nitrogen	0.8% by volume	
% ash	negligible	

Note: The values listed are "typical" values based upon information supplied by Florida Gas Transmission (FGT). However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

[1] Data from laboratory analysis

ATTACHMENT GA-EU1-C3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Attachment FS-EU1-L3
Detailed Description of Control Equipment

AmeriSteel, Baldwin Mill- Baghouse No. 1 and No. 2

Baghouse No. 3 & 4		
Manufacturer and Model No.	Fuller Model 6000	(b)
Outlet Gas Temp (F)	230	(a)
Outlet Gas Flow Rate (acfm)	305,540	(a)
Outlet Gas Flow Rate (dscfm)	232,000	
Exhaust Gas Moisture Content (%)	1.5	(a)
Cleaning Method	Shaker	
Total Area of Filter Media (sq. ft)	138,000	
Pressure Drop Across Device (inches of H2O)	8	
Air to Cloth Ratio	2-3	(b)
Outlet Loading (grains/dscf)	0.0052	(b)

Pollutant	Inlet Loading lb/hr	Outlet Loading lb/hr	Control Efficiency (%)
Particulate Matter	2060	10.3	99.5

(a) From air construction permit AC16-259246 (PSD-FL-221).
(b) From PSD application.

Inlet loading rate = outlet loading rate / [1- (control efficiency/100)]

Footnotes:
(a) From issued permit AC16-259246 (PSD-FL-221).
(b) From PSD application.
(c) Permitted emission limit.
(d) From PSD application - appendix B: 23 compartments at 6000 ft^2 per compartment.

Attachment FS-EU1-L3
Detailed Description of Control Equipment

AmeriSteel, Baldwin Mill- Baghouse No. 3 and No. 4

Baghouse No. 3 & 4				
Manufacturer and Model No.			Fuller Model 6000	(b)
Outlet Gas Temp (F)			120	(a)
Outlet Gas Flow Rate (acfm)			320,000	(a)
Outlet Gas Flow Rate (dscfm)			292,420	
Exhaust Gas Moisture Content (%)			1.8	(a)
Cleaning Method			Shaker	
Total Area of Filter Media (sq. ft)			144,000	
Pressure Drop Across Device (inches of H2O)			8	
Air to Cloth Ratio			2-3	(b)
Outlet Loading (grains/dscf)			0.0052	(b)

Pollutant	Inlet Loading lb/hr	Outlet Loading lb/hr	Control Efficiency (%)
Particulate Matter	2600	13.0	99.5

(a) From air construction permit AC16-259246 (PSD-FL-221).
(b) From PSD application.

ATTACHMENT GA-EU1-C4

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT GA-EU1-C4

DRAFT PROCEDURES FOR STARTUP AND SHUTDOWN

The following pages of this attachment contain the general procedures for operation including startup and shutdown for the Jacksonville Mill Division Melt Shop's emission control system for the EAF and meltshop building. These procedures are currently being revised and therefore the procedures herein may be subject to change.

GERDAU AMERISTEEL™

JACKSONVILLE MILL DIVISION

BAGHOUSE MAINTENANCE AND OPERATING PLAN

Revised November 10, 2003

Equipment overview - General

The Jacksonville Mill Division Melt Shop's emission control system for the EAF (electric arc furnace) and melt shop building consists of the following items:

Baghouse 1 & 2 (west):

- A stack
- Two induced draft fans individually powered by a 500 HP, 4160 V electric motor
- A 24-compartment, negative pressure, shaker-type baghouse system. Flow through this system is approximately 300,000 ACFM. Dampers, timers, and shaker mechanisms periodically clean the individual compartments.
- A spark arrestor system
- A booster blower powered by a 500 HP, 4160V electric motor.
- A booster blower damper
- Two heat exchangers
- Associated ductwork
- Screw conveyors

Baghouse 3 & 4 (east):

- A stack
- Two induced draft fans individually powered by a 500 HP, 4160 V electric motor.
- A 20-compartment, negative pressure, shaker-type baghouse system. Flow through this system is approximately 300,000 ACFM. Dampers, timers, and shaker mechanisms periodically clean the individual compartments.
- A spark arrestor system
- A ladle stir station hood and blower.
- Associated ductwork

Other associated equipment:

- Pneumatic conveying system.
- Dust silo
- Rail loading building.
- Truck loading building
- Opacity Monitors
- Radiation Detector

General Operating and Maintenance:

Impellers and motors – All fan assemblies shall be checked on a shift basis to assure that proper operating conditions are maintained. Excessive noise, heat, vibrations, and motor amperes are indicators of potential failures. If any of these conditions develop, then the electric arc furnace shall be shut down, and a detailed inspection of the fan motors, bearings, and couplings shall be conducted. Failure to conduct a detailed inspection of the condition can result in significant down-time and costly repairs. Bearings shall be checked for proper lubrication on a daily basis. Couplings and impellers shall be inspected on every down-day.

Baghouse screw conveyors – The baghouse screw conveyor system shall be inspected on a shift-basis to assure proper operating conditions are maintained. Screw conveyor drives, belts, motors, and troughs are all intricate parts of the operating system. A failure in a single screw can quickly cause a significant restriction within the baghouse system.

Baghouse compartments and hoppers – The baghouse compartments contain filter bags for the operating system. It also houses the shaker mechanism, bag racks, tubesheets, isolation dampers, and dust hoppers. These systems shall be inspected on a daily basis to assure proper operation. Dust hoppers require weekly shakedowns (vibration cleaning) to remove accumulated dust from the walls and corners of the system. Failure to complete this operation will dramatically restrict airflow through the system. All hoppers should be very warm to the touch during normal operating conditions. Hoppers, which are cool to the touch, require shakedown.

Baghouse filter bags – The dimensions of a bag are 5" diameter, 200" long, and a 15" tailstrap. The bottom of the bag is mounted to the tubesheet, while the top to a clamp on the shaker rack. The bags have to be tensioned properly during installation, and must be periodically check for stretching or shrinkage. All bags must be inspected on a weekly basis, or as needed.

Dust silo - The silo is the final stage for baghouse dust prior to being transported off-site. The silo has load cells to indicate the amount of material contained. The maximum operating level for the silo is 325,000 pounds. The system also has a series of butterfly valves, a loading chute, and a vibration system to reduce the amount of dust build-up in addition to an aide in loading vehicles. The silo and building area shall be inspected on a shift basis to assure proper operating conditions are being maintained.

Pneumatic conveying system - This system is designed to convey baghouse dust from the screw conveyer system to the dust silo. It consists of a crusher,

rotary valve, air compressor, and a 4" steel line w/reinforced elbows for dust conveyance. This system needs to be inspected on a shift-basis. In addition, an indicator light, located in the EAF pulpit, will warn if a failure occurs with this system. Failure to inspect or quickly react to an alarm will cause a significant amount of effort to remedy the problem.

Ductwork, water-cooled ductwork, and heat exchangers – The ductwork system provides a means of conveyance for the gaseous and particulate emissions, from the EAF and Melt Shop, to the baghouse system. All ductwork is under negative pressure to prevent any potential fugitive emission from escaping. The heat exchangers and water-cooled ductwork are designed to assist in reducing waste stream temperatures prior to the entering the baghouse. These systems should be visually checked on a daily basis to assure proper operations. Water leaks in the water-cooled ductwork and heat exchangers shall be repaired as soon as possible.

System Operation

Gaseous and particulate emissions generated from the EAF, and Melt Shop operations, are drawn into the ductwork system, through the spark arrestors, through the inlet plenum, into the individual compartments, through the tubesheet, through the filter bag, through the outlet plenum, through the blowers/impellers, and out of the stack.

On a prescribe basis, a compartment isolation damper will close, thereby eliminating airflow through the compartment. At this point, the compartment is commonly referred to as being "off-line." Once closed, a shaker mechanism will be energized to remove some of the particulate material from the inside of the filter bags. The particulate will fall to the bottom of the tapered compartment, and will be remove by means of a screw conveyor system. The screw conveyor will transfer the dust to the pneumatic conveying system, which moves the material to the storage silo in preparation for off-site transfer. Once the compartment is cleaned, and a dwell time is satisfied, the isolation damper will open, thereby restoring airflow to the compartment. The compartment is now considered to be "on-line."

System start-up procedure

1. Assure that the EAF does not commence operations until the baghouse system is fully functional.
2. Controls for baghouse 1&2 are south of the hydraulic room. **Note: The voltage for these fans is 4160. All safety procedures shall be followed when energizing the electrical disconnect.** Energize

Baghouse 1&2 west fan, assure that motor amperage is within acceptable range. Energize baghouse 1&2 east fan, assure that motor amperage is within the acceptable range. The process of energizing fans must take place within 15 seconds. This will reduce the likelihood that one impeller will begin rotating in reverse. Inspect fan/motor assemblies for any unusual vibrations or conditions.

3. Controls for baghouse 3&4 are located in the baghouse office, just north of baghouse 3&4. . **Note: The voltage for these fans is 4160. All safety procedures shall be followed when energizing the electrical disconnect.** Energize Baghouse 3&4 west fan, assure that motor amperage is within acceptable range. Energize baghouse 3&4 east fan, assure that motor amperage is within the acceptable range. The process of energizing fans must take place within 15 seconds. This will reduce the likelihood that one impeller will begin rotating in reverse. Inspect fan/motor assemblies for any unusual vibrations or conditions.
4. Energize booster blower. **Note: The voltage for these fans is 4160. All safety procedures shall be followed when energizing the electrical disconnect.** Inspect fan/motor assemblies for any unusual vibrations or conditions.
5. Energize pneumatic conveying system air compressor/blower. Inspect for any unusual operating conditions.
6. Energize the lump crusher.
7. Energize all screw conveyor systems.
8. Energize rotary valves.
9. Energize shaker mechanisms.
10. Inspect shaker motor initiating system to assure operation.
11. Energize isolation damper systems.
12. Inspect entire system for any deficiencies.

System shut-down procedure

1. De-energize booster blower and main disconnect. **Note: The voltage for these fans is 4160. All safety procedures shall be followed when de-energizing the electrical disconnect.**
2. Once booster blower impeller ceases to rotate, de-energize baghouse 3&4 west fan and main disconnect. De-energize baghouse 3&4 east fan and main disconnect. **Note: The voltage for these fans is 4160. All safety procedures shall be followed when de-energizing the electrical disconnect.**
3. De-energize baghouse 1&2 west fan and main disconnect. De-energize baghouse 1&2 east fan and main disconnect. **Note: The voltage for these fans is 4160. All safety procedures shall be followed when de-energizing the electrical disconnect.**

4. De-energize isolation damper systems.
5. De-energize shaker motor mechanisms.
6. De-energize rotary valve system.
7. De-energize screw conveyor systems approximately 20 minutes after rotary valve de-energization.
8. De-energize lump crusher.
9. De-energize pneumatic conveying system air compressor and rotary valve.

Operational troubleshooting

It is vital to the operations of the Melt Shop that the baghouse system be operating at optimum levels for operational, as well as regulatory, purposes. To that end, the following guide is intended to assist in troubleshooting and remedying potential problem associated with the baghouse operating system. The actions to the problem are listed in priority sequence.

Problem: Lack of negative pressure at the electric arc furnace.

Actions:

1. Check for obstruction in water-cooled ductwork.
2. Check booster blower damper and motor amperes.
3. Check BH 1&2 induced draft fans (baghouse fans), motors, couplings and motor amperes. If only one operating, shut-down EAF immediately.
4. Check BH 1&2 compartment isolation valves.
5. Check BH 1&2 compartment hoppers for temperature. If cold, manually vibrate to eliminate obstruction. If hot, then operating properly.
6. Check BH 1&2 screw conveyors.
7. Check BH 1&2 rotary valves.
8. Check ductwork for obstructions or failure.
9. Check spark arrestor.
10. Check diversion damper.
11. Check inlet and outlet plenum for failure.
12. Check timers on compartment shakers.
13. Check 4^{th} hole orientation.
14. Check bezel ring.
15. Check heat exchangers for water leaks and obstructions.
16. Check pneumatic conveying system, lump crusher, rotary valve, and piping system.
17. Check compartment differential pressures.

Problem: Temperature in Baghouse 1&2 excessive.

Actions:

1. Check BH 1&2 induced draft fans (baghouse fans), motors, couplings and motor amperes. If only one operating, shut-down EAF immediately.
2. Check BH 1&2 compartment isolation valves.
3. Check timers on compartment shakers.
4. Check diversion damper.
5. Check for obstruction in canopy ductwork system.
6. Check scrap mix and oxygen injection rates.

Problem: Excessive fugitive emissions.

Actions:

1. Check BH 3&4 induced draft fans (baghouse fans), motors, couplings and motor amperes. If only one operating, shut-down EAF immediately.
2. Check BH 1&2 induced draft fans (baghouse fans), motors, couplings and motor amperes. If only one operating, shut-down EAF immediately.
3. Check BH 3&4 compartment isolation valves.
4. Check BH 3&4 compartment hoppers for temperature. If cold, manually vibrate to eliminate obstruction. If hot, then operating properly.
5. Check BH 3&4 screw conveyors.
6. Check ductwork for obstructions or failure.
7. Check spark arrestor.
8. Check inlet and outlet plenum for failure.
9. Check timers on compartment shakers.
10. Check compartment differential pressures.
11. Check BH 3&4 screw conveyors.
12. Check pneumatic conveying system, lump crusher, rotary valve, and piping system.
13. Check compartment differential pressures.

Problem: Excess stack emissions.

Actions:

1. Begin isolating compartment for baghouse system w/problem.
2. If problematic compartment isolated and problem resolved, then enter compartment and inspect all filter bags, tube sheets, and shaker mechanisms.
3. Check BH induced draft fans (baghouse fans), motors, couplings and motor amperes. If only one operating, shut-down EAF immediately.
4. Check BH compartment isolation valves.
5. Check BH compartment hoppers for temperature. If cold, manually vibrate to eliminate obstruction. If hot, then operating properly.
6. Check compartment differential pressures.
7. Check timers on compartment shakers.
8. Check BH screw conveyor systems.
9. Check pneumatic conveying system, lump crusher, rotary valve, and piping system.

Problem: Pneumatic conveying system failure.

Actions:

1. Shut-down screw conveyors and rotary valve.
2. Divert all dust to railcar.
3. Restart BH 1&2 screw conveyor system.
4. Check air compressor/blower, rotary valve, and lump crusher for obstructions.
5. Once on-line, reverse baghouse 1&2 main take-away screw conveyor.
6. Start BH 1&2 screw conveyors, then rotary valves.
7. Start BH 3&4 screw conveyor system.

ATTACHMENT GA-EU1-C6

COMPLIANCE DEMONSTRATION REPORTS/RECORDS

TITLE V PERMIT COMPLIANCE TEST REPORT

FOR

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
TITLE V PERMIT NO. 0310157-002-AV

GERDAU AMERISTEEL CORPORATION
BALDWIN, FLORIDA

ELECTRIC ARC FURNACE
BAGHOUSES 1, 2, 3 & 4

MAY 19-20, 2003

AMBIENT AIR SERVICES, INC.
106 AMBIENT AIR WAY
STARKE, FLORIDA 32091
(904) 964-8440

Ambient Air Services, Inc. of Starke, Florida, has completed the testing described in this report for Gerdau AmeriSteel's Baldwin, Florida facility. To the best of our knowledge and abilities we certify that all information, facts and test data are true and correct. Information supplied to AASI for use in this report from Gerdau AmeriSteel is perceived to be accurate and is used as such where necessary. This report was reviewed by:

David C. Sholtes, Report Review — Date: 6/27/03

Joseph L. Cooksey, Project Manager — Date: 6/29/03

Any questions concerning this test report or the process information should be directed to the following people:

Mr. James Wold
Gerdau AmeriSteel Corporation
P. O. Box 518
Baldwin, FL 32234
Phone: 904-266-4261
Fax: 904-266-2996

Joseph L. Cooksey
Ambient Air Services, Inc.
106 Ambient Air Way
Starke, FL 32091
Phone: 904-964-8440
Fax: 904-964-6675

1.0 EXECUTIVE SUMMARY

On May 19-20, 2003, compliance tests were conducted on the electric arc furnace owned and operated by Gerdau AmeriSteel Corporation located in Baldwin, Florida. The compliance testing was conducted in accordance with the requirements listed in the Florida Department of Environmental Protection issued Title V Air Permit Number 0310157-002-AV. The results of this testing are summarized in Table 1. These results demonstrate compliance with the New Source Performance Standards provisions of 40 CFR 60, Subpart AAa as well as with the State of Florida Air Permit imposed limitations for particulate, lead, carbon monoxide, oxides of nitrogen emissions, volatile organic compounds and visible emissions.

TABLE I

COMPLIANCE TEST RESULTS
EXECUTIVE SUMMARY
GERDAU AMERISTEEL CORPORATIONS JACKSONVILLE MILL DIVISION
BALDWIN, FLORIDA

MAY 1- 20, 2003

SOURCE	PARAMETER	ALLOWABLE	TEST RESULTS
Electric Arc Furnace Baghouses	Particulate	0.0034 gr/dscf.	0.0018 gr/dscf [1]
	Oxides of Nitrogen	33.0 lbs. NO/hr. 0.33 lbs. NO/ton 118.8 TPY	12.8 lbs NO/hr. 0.14 lbs NO/ton 51.2 TPY[2]
	Carbon Monoxide	300 lbs. CO/hr. 3.0 lbs. CO/ton 1080 TPY	137.6 lbs. CO/hr. 1.5 lbs. CO/ton 550.3 TPY[2]
	Volatile Organic Compounds	29.5 lbs. VOC/hr. 0.295 lbs. VOC/ton 106.2 TPY	11.5 lbs. VOC/hr. 0.123 lbs. VOC/ton 46.1 TPY[2]
	Lead	0.70 lbs/hr. 2.8 TPY	0.13 lbs/hr. 0.6 TPY[2]
	Visible Emissions	3% Opacity	0.0%
Meltshop Building	Visible Emissions	6% Opacity	1.0%
Dust Handling System	Visible Emissions	10% Opacity	0.0%

[1] Flow weighted average of the two baghouses
[2] Assumes 8000 operating hours per year at an average production of 92.73 tons per hour

COMPLIANCE TESTING REPORT

BILLET REHEAT FURNACE

AMERISTEEL CORPORATION
BALDWIN, FLORIDA

June 06, 2003

AMBIENT AIR SERVICES, INC.
106 AMBIENT AIR WAY
STARKE, FLORIDA 32091
(904) 964-8440

Ambient Air Services, Inc. of Starke, Florida, has completed the testing described in this report for AmeriSteel Corporation's facility located in Baldwin, Florida. To the best of our knowledge and abilities we certify that all information, facts and test data are true and correct. Information supplied to AASI for use in this report from AmeriSteel is perceived to be accurate and is used as such where necessary. This report was prepared and certified by:

Randy L. Weston, Project Manager — Date

David C. Sholtes, Report Review — Date 7/08/03

Questions and or comments regarding this report or process conditions should be directed to:

Mr. James Wold
AmeriSteel Corp. Baldwin
517 Yellow Water Rd.
Baldwin, FL 32234
Phone: 904-266-4261 x 133
Fax: 904-266-2996

Mr. Randy Weston
Ambient Air Services, Inc.
106 Ambient Air Way
Starke, FL 32091
Phone: 904-964-8440
Fax: 904-964-6675

EXECUTIVE SUMMARY

On June 06, 2003 compliance tests were conducted on the Billet Reheat Furnace owned and operated by AmeriSteel Corporation of Baldwin, Florida. The compliance testing was conducted for particulate, carbon monoxide, oxides of nitrogen and opacity emissions, in accordance with the requirements listed in the Florida Department of Environmental Protection issued Title V Permit 0310157-002-AV. The results of this testing, which demonstrate compliance with all permit conditions, are summarized in Table 1.

TABLE 1

PARAMETER	PERMIT LIMIT	AVERAGE TEST RESULTS
Particulate Emissions	2.4 lbs/hr. PM10 10.2 TPY	1.32 lbs./hr. 5.62 TPY
Visible Emissions	15.0% opacity	0.0%
Oxides of Nitrogen (NO_x) (as measured)	0.19 lbs/mmBtu 179.3 TPY	0.165 lbs/mmBtu 111.42 TPY*
Carbon Monoxide (CO)	0.035 lbs/mmBtu 7.7 lbs/hr. 33 TPY	0.000 lbs/mmBtu 0.042 lbs/hr. 0.177 TPY*

*Based on 8500 operating hours per year

ATTACHMENT GA-EU1-C7

IDENTIFICATION OF APPLICABLE REQUIREMENTS

Title V Core List

Effective: 03/01/02

[**Note:** The Title V Core List is meant to simplify the completion of the "List of Applicable Regulations" for DEP Form No. 62-210.900(1), Application for Air Permit - Long Form. The Title V Core List is a list of rules to which all Title V Sources are presumptively subject. The Title V Core List may be referenced in its entirety, or with specific exceptions. The Department may periodically update the Title V Core List.]

Federal: ***(description)***

40 CFR 61, Subpart M: NESHAP for Asbestos.

40 CFR 82: Protection of Stratospheric Ozone.
40 CFR 82, Subpart B: Servicing of Motor Vehicle Air Conditioners (MVAC).
40 CFR 82, Subpart F: Recycling and Emissions Reduction.

State: ***(description)***

CHAPTER 62-4, F.A.C.: PERMITS, effective 06-01-01

62-4.030, F.A.C.: General Prohibition.
62-4.040, F.A.C.: Exemptions.
62-4.050, F.A.C.: Procedure to Obtain Permits; Application.
62-4.060, F.A.C.: Consultation.
62-4.070, F.A.C.: Standards for Issuing or Denying Permits; Issuance; Denial.
62-4.080, F.A.C.: Modification of Permit Conditions.
62-4.090, F.A.C.: Renewals.
62-4.100, F.A.C.: Suspension and Revocation.
62-4.110, F.A.C.: Financial Responsibility.
62-4.120, F.A.C.: Transfer of Permits.
62-4.130, F.A.C.: Plant Operation - Problems.
62-4.150, F.A.C.: Review.
62-4.160, F.A.C.: Permit Conditions.
62-4.210, F.A.C.: Construction Permits.
62-4.220, F.A.C.: Operation Permit for New Sources.

CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS, effective 06-21-01

62-210.300, F.A.C.: Permits Required.
62-210.300(1), F.A.C.: Air Construction Permits.
62-210.300(2), F.A.C.: Air Operation Permits.
62-210.300(3), F.A.C.: Exemptions.
62-210.300(5), F.A.C.: Notification of Startup.
62-210.300(6), F.A.C.: Emissions Unit Reclassification.
62-210.300(7), F.A.C.: Transfer of Air Permits.

62-210.350, F.A.C.: Public Notice and Comment.
62-210.350(1), F.A.C.: Public Notice of Proposed Agency Action.
62-210.350(2), F.A.C.: Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.
62-210.350(3), F.A.C.: Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources.

62-210.360, F.A.C.: Administrative Permit Corrections.
62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility.
62-210.400, F.A.C.: Emission Estimates.
62-210.650, F.A.C.: Circumvention.
62-210.700, F.A.C.: Excess Emissions.

62-210.900, F.A.C.: Forms and Instructions.
62-210.900(1), F.A.C.: Application for Air Permit – Title V Source, Form and Instructions.
62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions.
62-210.900(7), F.A.C.: Application for Transfer of Air Permit – Title V and Non-Title V Source.

CHAPTER 62-212, F.A.C.: STATIONARY SOURCES - PRECONSTRUCTION REVIEW, effective 08-17-00

CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION, effective 04-16-01

62-213.205, F.A.C.: Annual Emissions Fee.
62-213.400, F.A.C.: Permits and Permit Revisions Required.
62-213.410, F.A.C.: Changes Without Permit Revision.
62-213.412, F.A.C.: Immediate Implementation Pending Revision Process.
62-213.415, F.A.C.: Trading of Emissions Within a Source.
62-213.420, F.A.C.: Permit Applications.
62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.
62-213.440, F.A.C.: Permit Content.
62-213.450, F.A.C.: Permit Review by EPA and Affected States
62-213.460, F.A.C.: Permit Shield.

62-213.900, F.A.C.: Forms and Instructions.
62-213.900(1), F.A.C.: Major Air Pollution Source Annual Emissions Fee Form.
62-213.900(7), F.A.C.: Statement of Compliance Form.

CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS, effective 03-02-99

62-296.320(4)(c), F.A.C.: Unconfined Emissions of Particulate Matter.

62-296.320(2), F.A.C.: Objectionable Odor Prohibited.

CHAPTER 62-297, F.A.C.: STATIONARY SOURCES - EMISSIONS MONITORING, effective 03-02-99

62-297.310, F.A.C.: General Test Requirements.
62-297.330, F.A.C.: Applicable Test Procedures.
62-297.340, F.A.C.: Frequency of Compliance Tests.
62-297.345, F.A.C.: Stack Sampling Facilities Provided by the Owner of an Emissions Unit.
62-297.350, F.A.C.: Determination of Process Variables.
62-297.570, F.A.C.: Test Report.
62-297.620, F.A.C.: Exceptions and Approval of Alternate Procedures and Requirements.

Miscellaneous:

CHAPTER 28-106, F.A.C.: Decisions Determining Substantial Interests
CHAPTER 62-110, F.A.C.: Exception to the Uniform Rules of Procedure, effective 07-01-98
CHAPTER 62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 11-30-94
CHAPTER 62-257, F.A.C.: Asbestos Notification and Fee, effective 02-09-99
CHAPTER 62-281, F.A.C.: Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling, effective 09-10-96

ATTACHMENT GA-EU1-C8

COMPLIANCE ASSURANCE MONITORING PLAN

COMPLIANCE ASSURANCE MONITORING PLAN
(CAM PLAN)

FOR

Gerdau Ameristeel

Jacksonville Steel Mill
Baldwin, Florida

February, 2003

I. EMISSION UNITS REQUIRING CAM PLANS

A. CAM Rule Applicability Definition

As part of these Title V renewal applications EPA, through regulations adopted in Title 40, Part 64 of the Code of Federal Regulations (40 CFR 64), is requiring submittal of Compliance Assurance Monitoring (CAM) Plans. This regulation has been incorporated by reference by FDEP in Rule 62-204.800 and implemented in Rule 62-213.440.

CAM plans are required for all Title V permitted emission units using control devices to meet federally enforceable emission limits or standards with uncontrolled emissions greater than "major" source thresholds. The term "major" is defined as in the Title V Regulations (40 CFR 70), but applied on a source-by-source basis. However, there are some specific exemptions to the applicability of the CAM Rule.

Specifically exempted from the CAM Rule are emissions units subject to requirements under Stratospheric Ozone Regulations (40 CFR 82), the Acid Rain Program (40 CFR 72), or that are part of an emission cap included in the Title V Permit. Also exempt are emission units subject to New Source Performance Standards (40 CFR 60) and National Emission Standards for Hazardous Air Pollutants (40 CFR 63) promulgated after 11/15/1990, as these sources have CAM equivalent monitoring requirements included as part of the standard.

B. Emissions Units Requiring CAM Plans

A review of emission units at Gerdau Ameristeel's Jacksonville Steel Mill was conducted to determine the applicability of the CAM Rule. This evaluation was conducted for each emission unit and pollutant. First, the existence of a "control device" as defined by the CAM Rule was determined on a source-by-source basis for each pollutant. Those emission units without control devices were eliminated from further consideration. The remaining emission units were then evaluated on a pollutant-by-pollutant basis to determine if a control device was used to meet a federally enforceable emission limit or standard. Each pollutant without a federally enforceable

emission limit or standard, emitted from a given emission unit, was eliminated from further consideration. Uncontrolled annual emissions were then calculated for each remaining source-pollutant combination. If uncontrolled emissions for a pollutant emitted from a given emission unit source were below major source thresholds as defined by the CAM Rule, that pollutant was not further considered. Specific exemptions to the applicability of the CAM Rule were also considered in this evaluation.

Emission Unit 001 (Electric Arc Furnace)

Emission Unit 001 includes emission from the electric arc furnace (EAF) and continuous caster. The EAF uses electrical current and natural gas to melt scrap steel in a batch process. The maximum process rate is 110 tons of scrap steel per hour. The maximum production rate is 100 billet tons of steel per hour. Particulate matter (PM) is the only controlled emission from Emission Unit 001. PM emissions are controlled by two fabric filter (baghouses), identified as Baghouse 1-2 and Baghouse 3-4.

The unit is not regulated under the Acid Rain, Phase II provisions. The unit is regulated under NSPS - 40 CFR 60, Subpart AAa, Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Construction After August 7, 1983, adopted and incorporated by reference in Rule 62-204.800(7)(b)6, F.A.C.; Rule 212.300, F.A.C. Subpart AAa includes the following standards for PM:

1. EAF gases exit from the control device and contain PM less then or equal to ~~0.0052~~ 0.0039? gr/dscf;
2. Opacity from the exit of the control device less than 3 percent;
3. Opacity from the exit of the shop, due solely to the operations of the EAF, less than 6 percent;
4. Opacity from dust handling systems less than 10 percent.

The General Preconstruction Review Requirements; Rule 62-212.400, F.A.C. Prevention of Significant Deterioration (PSD); is also applicable to Emission Unit 001. Although Emission

Unit 001 has federally enforceable limits for nitrogen oxides, carbon monoxide, and volatile organic compounds, there are no control devices for these pollutants and thus no requirements for CAM.

Since a federally enforceable emission limit exists for PM, a control device is used to comply with the PM emission limit, and uncontrolled PM emissions are greater than 100 TPY, a CAM plan is required for Unit 001 for PM.

Emission Unit 002 (Billet Reheat Furnace)

Unit 002 has federally enforceable limits for PM, nitrogen oxides, and carbon monoxide. However, there are no control devices for these pollutants and thus no requirements for CAM.

Emission Unit 003 (Slag Processing Operations)

Unit 003 has no federally enforceable emission limitations. Unit 003 has no requirements for CAM.

Emission Unit 004 (Meltshop Building)

Unit 004 has only visible emission limitations. Unit 004 has no requirements for CAM

II. PARTICULATE EMISSIONS FROM EMISSION UNIT 001

A. Emissions Unit Identification

Emission Unit 001 includes emission from the electric arc furnace (EAF) and continuous caster. The EAF uses electrical current and natural gas to melt scrap steel in a batch process. Two negative pressure fabric filter baghouses are utilized to control particulate matter emissions. One baghouse serves the forth-hole duct of the EAF, which is a direct evacuation system off the furnace. The second baghouse serves the canopy collection system which vents the EAF and continuous caster. Each baghouse is equipped with an exit stack.

PM compliance testing is required annually on Unit 001. In addition, a continuous opacity monitoring system (COMS) is utilized to record the opacity of each of the baghouse stacks. The

COMS must be properly calibrated, operated, and maintained in accordance with Rule 62-297.520, F.A.C.

C. Control Technology Description

PM emissions from Unit 001 are controlled by two negative pressure fabric filter baghouses. The effectiveness of each baghouse is evaluated with an annual stack test and continuous opacity measurements from the baghouse stack. A detailed description of the control equipment is included in the Title V renewal application.

D. Monitoring Approach

The monitoring approach for particulate emissions to meet the CAM requirements are summarized in the table below. In general, baghouse compartment differential pressure will be used as the basis for CAM.

	Indicator No. 1
Indicator	Baghouse Compartment Differential Pressure.
Measurement Approach	Magnahelic or U-Tube Monometer Differential Pressure Gage
Indicator Range	An excursion is defined as an individual baghouse compartment differential pressure equal to or greater than 6 in of water (2 times per 24 hour period). An excursion will trigger an evaluation of the compartment and baghouse as defined in the Baghouse Maintenance and Operating Plan. Corrective action will be taken as necessary. Any excursion will trigger recordkeeping and reporting requirements.
Data Representativeness	Differential pressure is monitored in each compartment of both baghouses. Baghouse 1-2 has a total of 24 compartments. The differential pressure is monitored in 12 compartments because the compartments are connected in pairs. Baghouse 3-4 has a total of 20 compartments with each monitored for differential pressure. The differential pressure reading of each compartment will be recorded at least 2 times per 24 hour period manually or continuously via computer data logging system.

Verification of Operational Status	NA
QA/QC Practices and Criteria	The differential pressure gages and ancillary equipment will be tested and calibrated quarterly as prescribed by the manufacture.
Monitoring Frequency	The differential pressure reading of each compartment will be recorded at least 2 times per 24 hour period.
Data Collection Procedures	The differential pressure reading of each compartment will be recorded at least 2 times per 24 hour period manually or continuously via computer data logging system.
Averaging Period	Each recorded differential pressure will trigger action if above the indicator range.

E. Justification

1. Background

The pollutant specific emission unit is Unit 001. It is controlled by a baghouse, which has a control efficiency estimated at 99% or greater.

2. Rationale for Selection of Performance Indicator

Compliance test data for the last 5 years was analyzed to determine if a correlation could be made for particulate grain loading and baghouse pressure drop. Grain loading was plotted versus baghouse pressure drop and the results can be seen in Figures 1 and 2. As shown, there is almost no correlation between grain loading and baghouse pressure. Based on the correlation and nature of the data, more test data will not result in a better correlation.

Since a good correlation based on test data does not exist, an approach to CAM based on current procedures is proposed. The proposed procedure is as follows:

> If the any individual compartment differential pressure exceeds 6 inches of water for any recorded reading, the procedures defined in the Baghouse Maintenance and Operating Plan – Operational Troubleshooting shall be implemented (See Attachment GA-FI-XX).

An increase of differential pressure greater than 6 inches of water for a sustained period could indicate impaired performance of the baghouse to control particulate.

3. Rationale for Selection of Indicator Ranges

The selected indicator range is 6 inches water differential pressure for each baghouse compartment. Differential pressure was selected as the performance indicator for CAM because it is good indicator of proper operation and maintenance of the baghouse. Operational experience has shown that when the baghouse is operating properly, differential pressure levels will be generally less than 6 inches of water. This indicator range was selected because differential pressure readings of greater magnitude could indicate impaired baghouse performance and an associated increase in particulate emissions from the baghouse outlet. As discussed, to develop the indicator range, differential pressure readings were compared with stack test results of PM grain loading (gr/dscf). A correlation could not be developed for a relationship between grain loading and differential pressure.

When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence, to determine the action required (if any) to correct the situation. All excursions will be documented and reported in accordance with CAM requirements.

Figure 1. CAM Correlation Baghouse 1-2

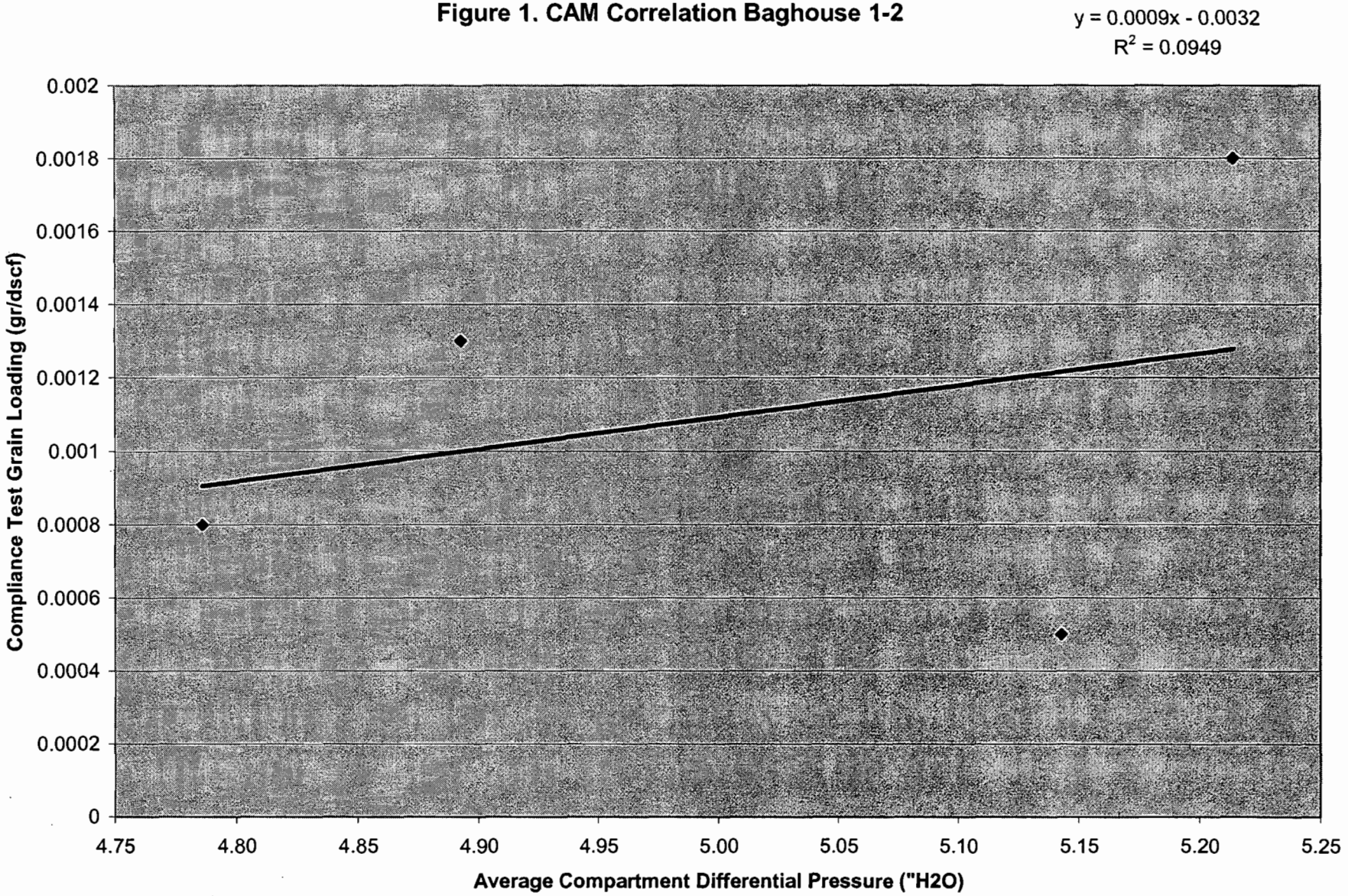
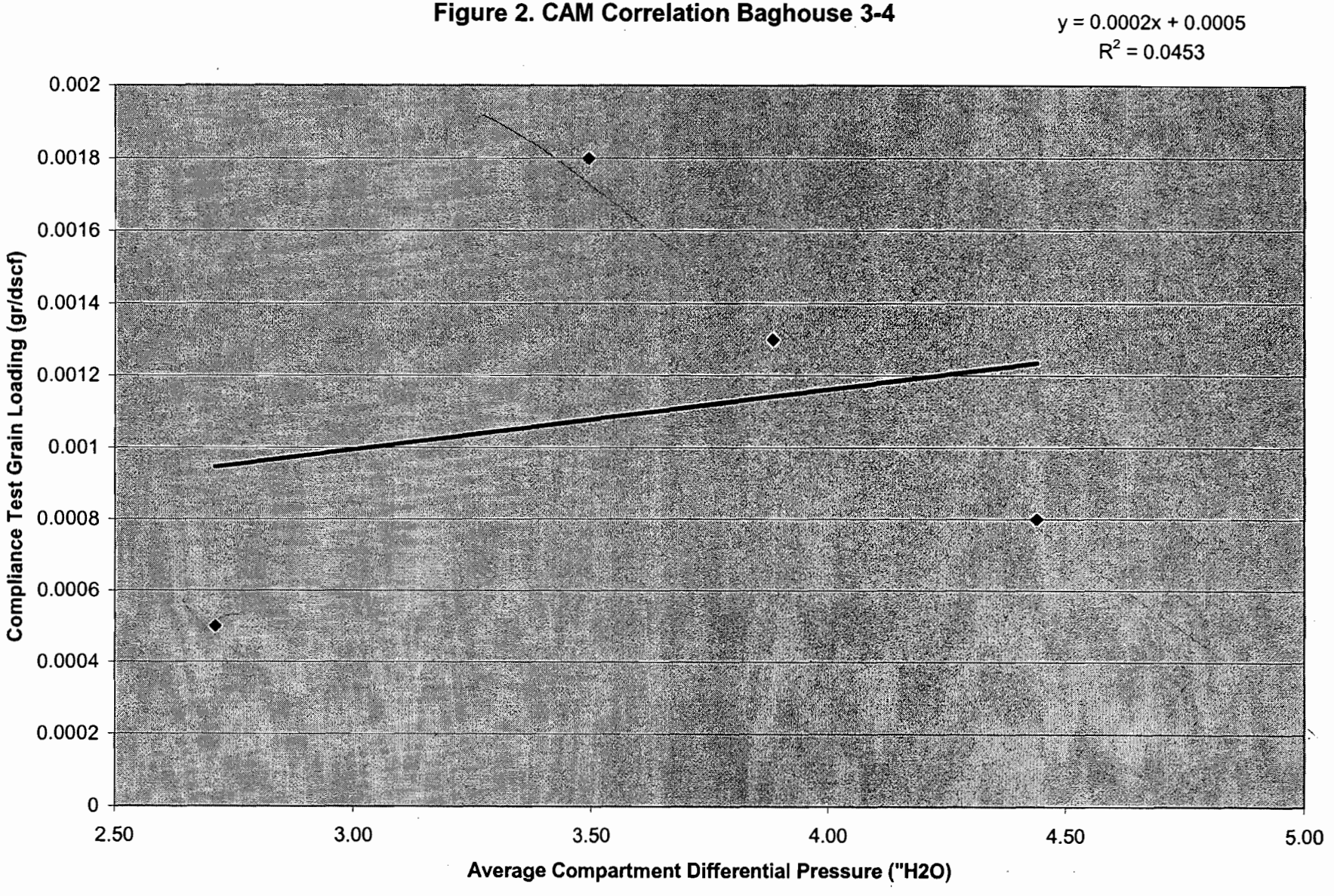


Figure 2. CAM Correlation Baghouse 3-4



III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   Billet Reheat Furnace

3. Emissions Unit Identification Number: **002**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**Apr 76**	**3390**	☐ Yes ☒ No

9. Package Unit:
   Manufacturer: **Brickmont** Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    Unit is fired by natural gas.

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:
2. Control Device or Method Code(s):

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **120 TPH (billet tons maximum daily average)**	
2. Maximum Production Rate: **720,000 billet tons per year**	
3. Maximum Heat Input Rate: **222** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**7** days/week **8,500** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **002**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Reheat Furnace Stack**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **160** feet	7. Exit Diameter: **6.9** feet
8. Exit Temperature: **900**°F	9. Actual Volumetric Flow Rate: **43,620** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Primary metals, fuel fired equipment, process heaters, Natural Gas**		
2. Source Classification Code (SCC): **3-03-900-03**	3. SCC Units: **MMCuft**	
4. Maximum Hourly Rate: **0.2178**	5. Maximum Annual Rate: **1,852**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,019**
10. Segment Comment: **Maximum hourly rate = 222.0 MMBtu/hr (Permit 0310157-002-AV) = 0.2178 MMCuft/hr. Maximum annual rate based on 8,500 hours.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Steel Production**		
2. Source Classification Code (SCC): **3-03-009-33**	3. SCC Units: **Billet tons**	
4. Maximum Hourly Rate: **120**	5. Maximum Annual Rate: **720,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Maximum hourly rate of 120 billet tons based on maximum daily average Permit 0310157-002-AV.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			EL
CO			EL
NO_x			EL

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control: **99%**
3. Potential Emissions: **2.4** lb/hour **10.2** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference: **Permit No. 0310157-002-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Limit from Permit No. 0310157-002-AV**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **2.4 lb/hour**	4. Equivalent Allowable Emissions: **2.4** lb/hour **10.2** tons/year
5. Method of Compliance: **EPA Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **7.7** lb/hour **33.0** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.035 lb/MMBtu** Reference: **Permit No. 0310157-002-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Limit from Permit No. 0310157-002-AV**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.035 lb/MMBru**	4. Equivalent Allowable Emissions: **7.7** lb/hour **33.0** tons/year
5. Method of Compliance: **EPA Method 10; 24-hour average.**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **42.2** lb/hour **179.3** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.19 lb/MMBtu** Reference: **Permit No. 0310157-002-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Limit from Permit No. 0310157-002-AV**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.19 lbMMBtu**	4. Equivalent Allowable Emissions: **42.2** lb/hour **179.3** tons/year
5. Method of Compliance: **EPA Method 7E.**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE15**	2. Basis for Allowable Opacity: ☐ Rule ☒ Other
3. Allowable Opacity: Normal Conditions: **15** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9.**	
5. Visible Emissions Comment: **Limit from Permit No. 0310157-002-AV**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE99**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **Best operational practices.**	
5. Visible Emissions Comment: **Excess emissions for startup, shutdown, malfunction not to exceed 2 hours per 24-hour period. Rule 62-210.700(1) and 40 CFR 60.11(c).**	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor 1 of 2

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor 2 of 2

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **GA-EU2-C1** ☐ Previously Submitted, Date ____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **GA-EU1-C2** ☐ Previously Submitted, Date ____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☐ Previously Submitted, Date ____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **GA-EU2-C2** ☐ Previously Submitted, Date ____
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **GA-EU2-C2** ☐ Previously Submitted, Date ____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records
   ☒ Attached, Document ID: **GA-EU1-C6**
   Test Date(s)/Pollutant(s) Tested: ____
   ____
   ☐ Previously Submitted, Date: ____
   Test Date(s)/Pollutant(s) Tested: ____
   ____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: ____
   ____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   ☐ Attached, Document ID: ____ ☒ Not Applicable

EMISSIONS UNIT INFORMATION
Section [2] of [4]
Billet Reheat Furnace

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☒ Not Applicable

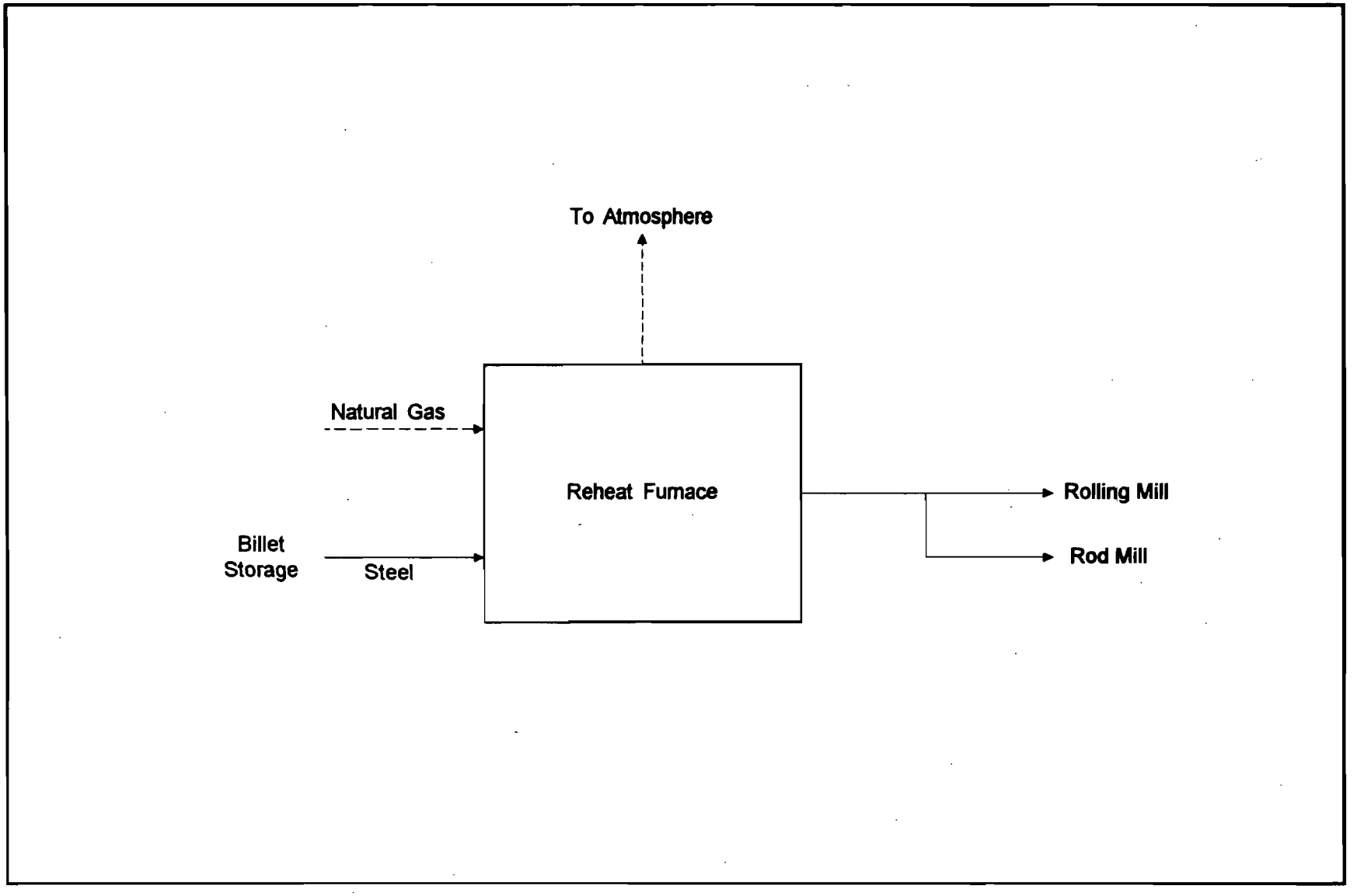
Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **GA-EU1-C7** ☐ Not Applicable
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID: _____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT GA-EU2-C1

PROCESS FLOW DIAGRAM



Attachment Process Flow Diagram AmeriSteel Corporation Jacksonville, FL	**Process Flow Legend** Solid/Liquid ——→ Gas - - - - →	Process Area: Reheat Furnace Filename: flsteel.vsd Date: April 23, 1996	KBN Engineering and Applied Sciences, Inc.

ATTACHMENT GA-EU2-C2

PROCEDURES FOR STARTUP

ATTACHMENT GA-EU2-C2

DRAFT PROCEDURES FOR STARTUP

The following pages of this attachment contain the general procedures for startup for the Jacksonville Mill Division Billet Reheat Furnace. These procedures are currently being revised and therefore the procedures herein may be subject to change.

Routine Procedure
Lighting the Reheat Furnace normal conditions.

ID 8482550-RP-014
Version 0

Authorized by:
Authorized date:

Last Modification: 11/13/2003
Last Modification by: afratesi

Preparation

Assumptions

- The top of the Reheat Furnace is extremely dangerous.
- The employee is familiar with the Routine Procedure for operating the Reheat Furnace.

Tools & Materials

Controls Required

Related Workflows

- Reheat Furnace Operation Auto / Manual

Process Instructions

Required People	Caution	Ear protection	Aluminized Clothin
Communication Re	Hard Hat	Hearing Protection	Cotton Glove
Safety Glasses	Warning		

Step 1 - STAY SAFE

1. Shutting down and lighting the Furnace involves the Manipulation of valves that supply Natural Gas to the Reheat furnace in large volumes. Any carelessness can result in severe damage to personnel and equipment.

2. Lighting the Heat Zone requires going on top of the Reheat Furnace. THIS IS A 'NO LONE ZONE'! IT REQUIRES TWO PEOPLE AT ALL TIMES TO GO ON TOP OF THE FURNACE.
This area is extremely hot, and to fall can cause serious injury.
Also, beware of the movement of the cranes in the area.

3. Before lighting the furnace, check with the Maintenance Department to ensure that no personell are around the furnace that might be affected by lighting the furnace.

Routine Procedure
Lighting the Reheat Furnace normal conditions.

Step 1 - STAY SAFE (Continued)

4. Always light the Soak Zone first! Once there is enough heat in the Soak Zone, you can light the Heat Zone.

Step 2 - Locate the Furnace Control Panel

1. This is located ground level at the northwest area of the furnace, east of the Combustion Air Blower.

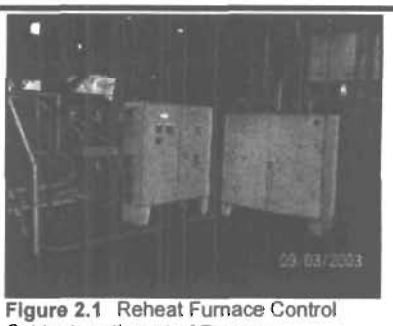


Figure 2.1 Reheat Furnace Control Cabinet northwest of Furnace

2. Verify that the Purge Complete light is lit on the Furnace Control Panel. If not:

3. Activate the Purge Cycle by pressing the Purge Start button on the Control Panel.
The Purge Cycle opens the Furnace Damper 100% and both of the Air Valves 100%. This 'purges' all the trapped gas out of the Furnace. This will normally happen automatically when the Maxon valves are shut. For this to work, the manual gas shutoff valve just to the left of the Maxon valves must be open. This manual valve is normally only closed during Furnace Outages.

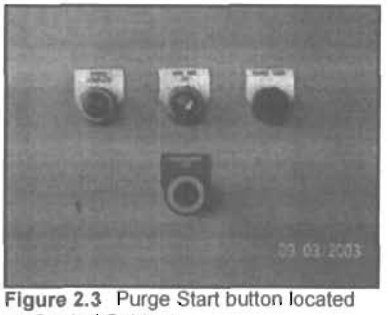


Figure 2.3 Purge Start button located on Control Cabinet

4. Wait three minutes. The Purge Complete light on the control panel should light.

Step 3 - Locate the Maxon Valves.

1. These are located east of the Control Panel on the Main Gas Line that supplies Natural Gas to the furnace.

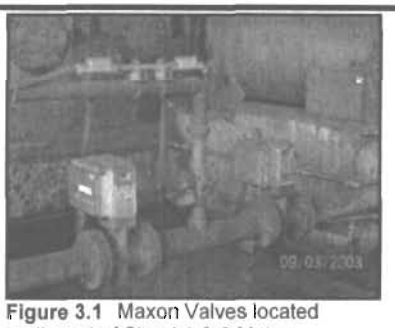


Figure 3.1 Maxon Valves located northwest of Stand 1 & 2 Motor.

Step 3 - Locate the Maxon Valves. (Continued)

2. The MAXON valves should indicate 'SHUT' , and the handle should be pointing to the west.
If the handle on the valve isn't pointing west, grab it on rotate it to the west. DO NOT try to rotate it all the way around by pushing it down. This will damage the valve. Simply pull it up and to the west.

Figure 3.2 MAXON valve, handle pointing west, valve indicates SHUT.

3. SLOWLY raise the handle on the north Maxon valve to open the valve. Continue moving the handle until it stops and is pointing east. The valve should indicate OPEN at this point.
This requires considerable effort to open this valve, this is normal. Once again, open this valve very, slowly.

Figure 3.3 Maxon Valve in 'OPEN' Position.

4. Use caution, if the handle is moved too rapidly toward the east, the valve will not set. To open these valves requires considerable effort, this is normal. Once again, open this valve very, slowly.

5. Repeat this procedure for the south Maxon valve.

Step 4 - Check / set the Controls in P-1

1. In P-1, select Furnace Overveiw screen on Level 1 computer.

Step 4 - Check / set the Controls in P-1 (Continued)

2. Check the temperature of the Soak Zone. This temperature must be over 1400 degrees to light the furnace in Normal conditions.
   If the Soak Zone temperature is lower than 1400 degrees: use RP # 8482550-RP-018. Lighting a Cold Reheat Furnace.
   If the Soak Zone temperature is 1400 degrees or higher, continue this procedure.
3. From the Furnace Overveiw screen, select Aux Controls F5 from menu at bottom of screen.
4. From the Auxillary Controls screen, place the Furnace Pressure PID loop in Auto.
5. From the Auxillary Controls screen, select Soak Temp F5 from the bottom menu on the screen.
6. On the Soak Zone Temperature Controller screen, ensure that the following PID loops are in Auto:
   Air Flow PID
   Gas Flow PID
   Air / Fuel Ratio
   If they are not in Auto, place them in Auto.
7. On the same screen, place the Temperature TIC in Manual with 0 (zero) output.
8. Open the Peel Bar Door, and the Discharge Door.

Step 5 - Lighting the Soak Zone: Normal Operation

1. Lighting the Soak Zone in Normal Operation requires that the twelve gas valves on the lower level of the east side of the Reheat Furnace be opened very slowly one at a time. The ignition source is the ambient temperature of the Soak Zone providing that it is still over 1400 degrees Fahrenheit.

Figure 5.1 Twelve Soak Zone Burners

Step 5 - Lighting the Soak Zone: Normal Operation (Continued)

2. Access the Soak Zone via the steps on the eastside of the furnace.

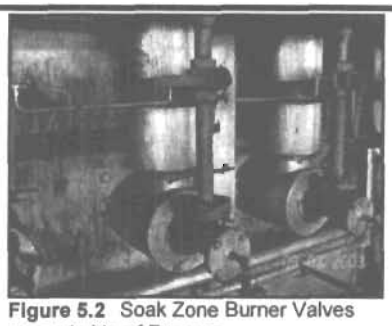


Figure 5.2 Soak Zone Burner Valves on east side of Furnace.

3. Be alert for hazards along the way, pertaining to the walkway, staircase etc.

4. Starting in the middle of the Furnace, SLOWLY open the sixth Gas valve from the South end.
STOP OPENING this valve as soon as you begin to hear the gas flowing through the valve.

5. Watch and listen for this burner to light. When it does, you will hear it and see the light of the flame in the pilot window below the burner.

Figure 5.5 Pilot window below gas valve. Burner lit.

6. Once this burner is lit, SLOWLY open it the rest of the way.

7. Now SLOWLY open valve # 7. Stop opening it as soon as you hear the gas flowing through it.

Step 5 - Lighting the Soak Zone: Normal Operation (Continued)

8. Watch and listen for this burner to light. When it does, you will hear it and see the light of the flame in the pilot window above the burner.

9. Once this burner is lit, SLOWLY open the valve the rest of the way.

10. Repeat this process for the rest of the twelve gas valves. Only open a valve that is right next to another lit burner. Ensure that all burners are lit by verifying the flame in the window above each burner.

Step 6 - Locate and open the Soak Zone Lance Gas Valve

1. Locate the small gas valve between valves seven and eight counting from the south end. There will be a detachable handle hanging next to the valve.

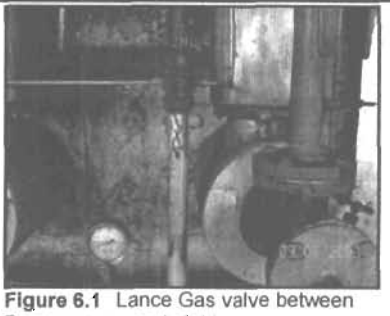


Figure 6.1 Lance Gas valve between Burner seven and eight.

2. Warning!! Do not open this valve until all of the Soak Zone Burners are lit!
This valve supplies gas to the center of all twelve burners to help the combustion when the furnace is operating in in low-fire profiles. Opening this valve will supply gas to all of the burners independent of the burner valves. This can be very dangerous if opened too soon.

Step 6 - Locate and open the Soak Zone Lance Gas Valve (Continued)

3. Place the handle on the valve.

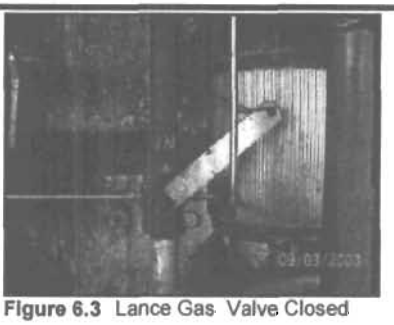


Figure 6.3 Lance Gas Valve Closed

4. Rotate the handle Couterclockwise to open this valve. It will only pivot 90 degrees.

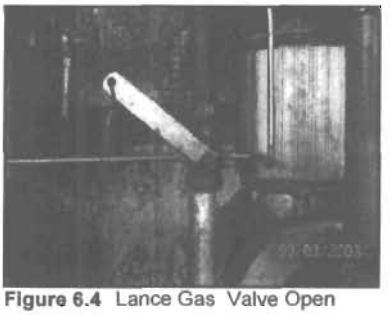


Figure 6.4 Lance Gas Valve Open

5. Remove the handle and hang it back on the valve.

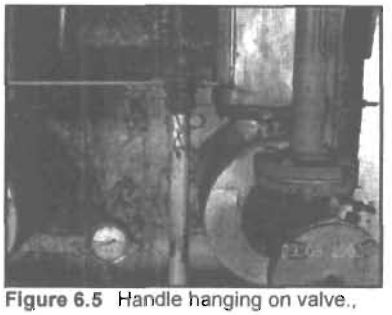


Figure 6.5 Handle hanging on valve.,

Step 7 - Put Soak Zone in Manual in P-1

1. Return to P-1
2. Close the Peel Bar Door and the Discharge Door.
3. Select Soak Zone Temperature Controller on the Level 1 monitor.
4. Place the Soak Zone in Manual.
5. Increase the OUTPUT to 20% and leave it in manual.

Step 7 - Put Soak Zone in Manual in P-1 (Continued)

6. Close the Furnace Discharge Door.

7. Monitor the Soak Zone Temperature. When it reaches 1800 degrees, raise the OUTPUT to 40%.

8. Contuinue to monitor the Soak Zone Temperature until the temperature reaches 2000 degrees.

9. Once the Soak Zone reaches 2000 degrees, light the Heat Zone.

Step 8 - Check / set the Controls in P-1 for the Heat Zone.

1. Select Heat Temp F6 from the menu at the bottom of the Furnace overview screen on the Level 1 control. This will bring up the Heat Zone Temperature Controller screen..

2. On the Heat Zone Temperature Controller screen, ensure that the following PID loops are in Auto
   Air Flow PID
   Gas Flow PID
   Air / Fuel Ratio

3. On the same screen, place the Temperature TIC in Manual with 0 (zero) output.

Step 9 - Lighting the Heat Zone.

1. Lighting the Heat Zone requires going on top of the Reheat Furnace. THIS IS A 'NO LONE ZONE'! IT REQUIRES TWO PEOPLE AT ALL TIMES TO GO ON TOP OF THE FURNACE.
   This area is extremely hot, and to fall can cause serious injury.
   Also, beware of the movement of the cranes in the area.

Step 9 - Lighting the Heat Zone. (Continued)

2. With a second employee, access the top of the Furnace via the staircase on the east side of the Reheat Furnace.

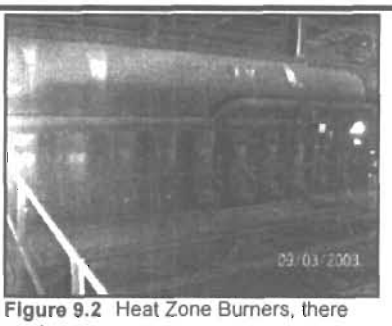


Figure 9.2 Heat Zone Burners, there are ten.

3. Starting with the fifth burner form the south end of the furnace, slowly open the valve until the burner lights.

4. Verify this by seeing the flame in the pilot window above the burner.

Figure 9.4 One Heat Zone burner lit

5. Repeat this process on the rest of the ten burners until they are all lit. Only light a burner that is next to one that is already lit. This will help ensure that they are all lighting properly.

Step 10 - Locate and open the Heat Zone Lance Gas valve.

Step 10 - Locate and open the Heat Zone Lance Gas valve. (Continued)

1. Locate the small gas valve between valves six and seven counting from the south end. There will be a detachable handle hanging next to the valve. This is the Lance Gas valve, As in the Soak Zone, this valve provides gas to the center of all ten Heat Zone burners. And it should not be opened until all ten Heat Zone burners are lit.

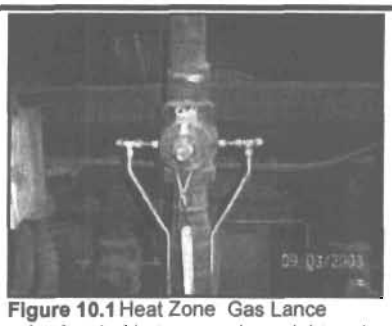


Figure 10.1 Heat Zone Gas Lance valve located between valves eight and nine.

2. Place the handle on the valve.

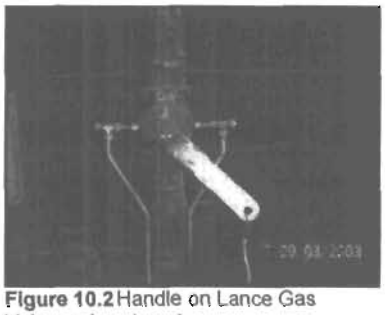


Figure 10.2 Handle on Lance Gas Valve, valve closed.

3. Rotate the handle Couterclockwise to open this valve. It will only pivot 90 degrees.

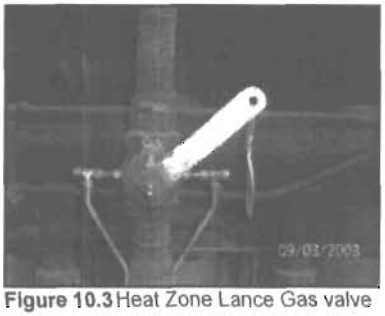


Figure 10.3 Heat Zone Lance Gas valve open.

4. Remove the handle and hang it back on the valve.

Figure 10.4 Handle hanging back on valve

5. The Heat Zone is now lit, exit the top of the Reheat Furnace.

Step 10 - Locate and open the Heat Zone Lance Gas valve. (Continued)

6. Return to the P-1 Pulpit

Step 11 - Put the Heat Zone in Manual in P-1

1. Select Heat Zone Temperature Controller on the Level 1 monitor.
2. Place the Heat Zone in Manual.
3. Increase the OUTPUT to 20% and leave it in manual.
4. Monitor the Heat Zone Temperature. When it reaches 1800 degrees, raise the OUTPUT to 40%.
5. Monitor the Heat Zone Temperature. When it reaches 1800 degrees, raise the OUTPUT to 40%.
6. Contuinue to monitor the Heat Zone Temperature until the temperature reaches 2000 degrees.
7. Once the Heat Zone reaches 2000 degrees place the Heat Zone Temperature TIC in Auto.
8. Set the Temperature TIC SETPOINT to 2000

Step 12 - Place Soak Zone in Auto

1. Select the Soak Zone Temperature Controller from the Level 1 monitor.
2. Place the Soak Zone Temperature TIC in Auto.
3. Set the Soak Zone Temperature TIC SETPOINT to 2100.
4. Both Zones of the furnace are now in Auto. Refer to Routine Procedure 8482550-RP-010, Reheat Furnace Operation Auto / Manual. Use this to operate the Furnace in Auto / Manual operation.

Routine Procedure
Lighting a cold Reheat Furnace

ID 8482550-RP-018
Version 0

Authorized by:	afratesi	Last Modification:	11/07/2003
Authorized date:	11/07/2003	Last Modification by:	afratesi

Preparation

Assumptions

- The employee is familiar with the Routine Procedure for running the Reheat Furnace.
- The top of the Reheat Furnace is extremely dangerous.

Tools & Materials

- Torch
- Channel-Locks

Controls Required

Related Workflows

- Reheat Furnace Operation Auto / Manual

Process Instructions

Required People	Caution	Aluminized Clothin	Hard Hat
Hearing Protection	Cotton Glove	Safety Glasses	Warning

Step 1 - STAY SAFE

1. Shutting down and lighting the Furnace involves the manipulation of valves that supply Natural Gas to the Reheat furnace in large volumes. Any carelessness can result in severe damage to personnel and equipment.
2. Lighting the Heat Zone requires going on top of the Reheat Furnace. THIS IS A 'NO LONE ZONE'! IT REQUIRES TWO PEOPLE AT ALL TIMES TO GO ON TOP OF THE FURNACE.
   This area is extremely hot, and to fall can cause serious injury.
   Also, beware of the movement of the cranes in the area.
3. Before lighting the furnace, check with the Maintenance Department to ensure that no personell are around the furnace that might be affected by lighting the furnace.
4. Always light the Soak Zone first! Once there is enough heat in the Soak Zone, you can light the Heat Zone.

Step 2 - Verify all burner valves are shut (Continued)

6. Place the handle on the valve as in this picture.

Figure 2.6 Pilot Valve Closed

7. Try to rotate the valve clockwise. If the valve was open, it will rotate easily. If it is closed, it will not rotate.

8. Once you have verified that all Soak Zone valves are closed, verify the Heat Zone valves are closed.

9. Checking the the Heat Zone burner valves, requires going on top of the Reheat Furnace. THIS IS A 'NO LONE ZONE'! IT REQUIRES TWO PEOPLE AT ALL TIMES TO GO ON TOP OF THE FURNACE.
This area can be extremely hot, and a fall can cause serious injury.
Also, beware of the movement of the cranes in the area.

10. With a second employee, access the top of the Furnace via the staircase on the east side of the Reheat Furnace.

Figure 2.10 Heat Zone, top of Reheat Furnace. No Lone Zone!

11. Check to make sure that all ten burner gas valves are off.

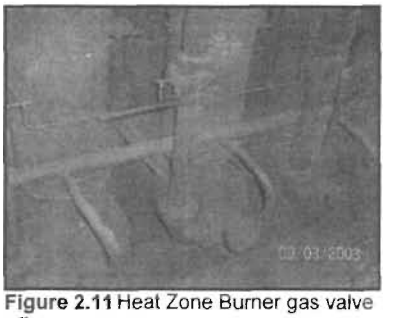


Figure 2.11 Heat Zone Burner gas valve off.

Step 2 - Verify all burner valves are shut

1. Before attempting to light the furnace. Verify that all burner valves are off. This will prevent gases from going into the furnace as soon as the Maxon Valves are opened.

2. Starting with the Soak Zone

Figure 2.2 Twelve Soak Zone Burners

3. Access the Soak Zone via the steps on the eastside of the furnace. Verify all twelve Soak Zone burner valve handles are in the horizontal or 'closed' position.

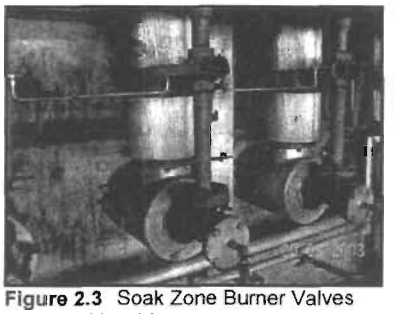


Figure 2.3 Soak Zone Burner Valves on east side of Furnace.

4. Locate and verify the at the Soak Zone Lance Gas Valve is closed.

5. Locate the small gas valve between valves seven and eight counting from the south end.
There will be a detachable handle hanging next to the valve.

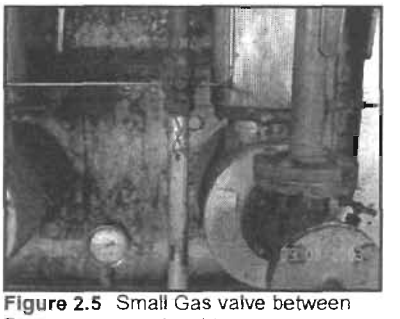


Figure 2.5 Small Gas valve between Burner seven and eight.

Step 2 - Verify all burner valves are shut (Continued)

12. Locate the small gas valve between valves eight and nine counting from the south end. There will be a detachable handle hanging next to the valve. This is the Lance Gas valve, As in the Soak Zone, this valve provides gas to the center of all ten Heat Zone burners. IT MUST BE OFF BEFORE LIGHTING THE FURNACE. Check this by:

Figure 2.12 Handle on Lance Gas Valve, valve closed.

13. Placing the handle on the valve, and try rotating the handle clockwise. If the valve was open, it will rotate easily. If it is closed, it will not rotate.

14. Once you have verified that all Heat Zone Valves are closed, exit the top of the furnace and continue with this procedure.

Step 3 - Check / set the Controls in P-1

1. In P-1, select Furnace Overveiw screen on Level 1 computer.
2. From the Furnace Overveiw screen, select Aux Controls F5 from menu at bottom of screen.
3. From the Auxillary Controls screen, place the Furnace Pressure PID loop in Auto.
4. From the Auxillary Controls screen, select Soak Temp F5 from the bottom menu on the screen.
5. On the Soak Zone Temperature Controller screen, place the Air Flow PID Loop in manual and the output at 25%
6. On the same screen, place the Gas Flow PID Loop in manual and the output at 35%.
7. Place the Air / Fuel Ratio in Auto.
8. Place the Temperature TIC in Manual with 35% output.
9. Open the Peel Bar Door, and the Discharge Door.

Step 4 - Locate the Furnace Control Panel

1. This is located ground level at the northwest area of the furnace, east of the Combustion Air Blower.

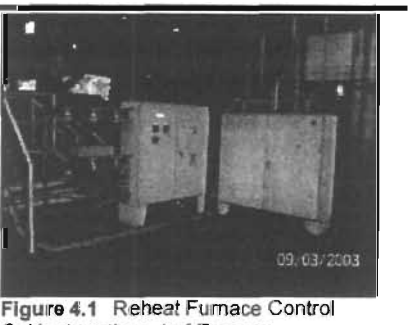


Figure 4.1 Reheat Furnace Control Cabinet northwest of Furnace

2. Verify that the Purge Complete light is lit on the Furnace Control Panel. If not:

3. Activate the Purge Cycle by pressing the Purge Start button on the Control Panel.
The Purge Cycle opens the Furnace Damper 100% and both of the Air Valves 100%. This 'purges' all the trapped gas out of the Furnace. This will normally happen automatically when the Maxon valves are shut. For this to work, the manual gas shutoff valve just to the left of the Maxon valves must be open. This manual valve is normally only closed during Furnace Outages.

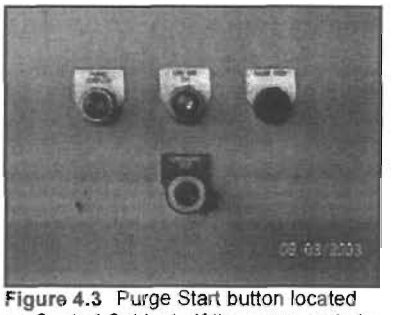


Figure 4.3 Purge Start button located on Control Cabinet. If the purge cycle is complete, the Purge Complete light will be on.

4. Wait three minutes. The Purge Complete light on the control panel should light.
If the Purge Complete light was already lit, the Purge was completed earlier and you can proceed to Step 4.

Step 5 - Locate the Maxon Valves.

1. These are located east of the Control Panel on the Main Gas Line that supplies Natural Gas to the furnace.

Step 5 - Locate the Maxon Valves. (Continued)

2. The MAXON valves should indicate 'SHUT' , and the handle should be pointing to the west.
If the handle on the valve isn't pointing west, grab it and rotate it to the west. DO NOT try to rotate it all the way around by pushing it down. This will damage the valve. Simply pull it up and to the west.

Figure 5.2 MAXON valve, handle pointing west, valve indicates SHUT.

3. SLOWLY raise the handle on the north Maxon valve to open the valve. Continue moving the handle until it stops and is pointing east. The valve should indicate OPEN at this point.
This requires considerable effort to open this valve, this is normal. Once again, open this valve very, slowly.

4. Use caution, if the handle is moved too rapidly toward the east, the valve will not set. To open these valves requires considerable effort, this is normal. Once again, open this valve very, slowly.

5. Repeat this procedure for the south Maxon valve.

Step 6 - Lighting the Soak Zone: Cold Reheat Furnace

1. Lighting the Soak Zone on a cold Furnace requires that the twelve gas valves on the lower level of the east side of the Reheat Furnace be opened very slowly one at a time and lit with a torch. This is dangerous! The torch can damage the furnace, the piping, or yourself. Use caution!!!

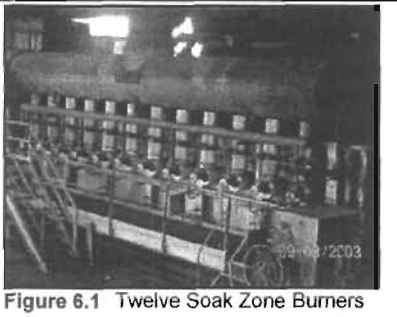


Figure 6.1 Twelve Soak Zone Burners

Step 6 - Lighting the Soak Zone: Cold Reheat Furnace (Continued)

2. Access the Soak Zone via the steps on the eastside of the furnace.

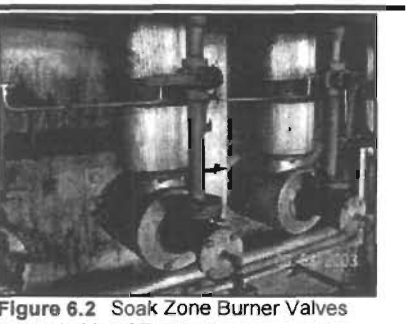


Figure 6.2 Soak Zone Burner Valves on east side of Furnace.

3. Be alert for hazards along the way, pertaining to the walkway, staircase etc.

4. Bring the torch from the northend of the walkway to sixth valve from the southend of the furnace.

5. On either side of the burners is a plug that is used when lighting the furnace with a torch.

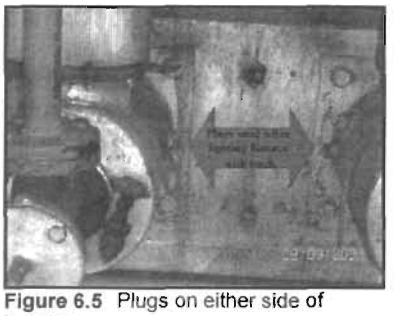


Figure 6.5 Plugs on either side of burners.

6. On the sixth valve from the south end of the furnace, remove the plug on the south side of the burner.

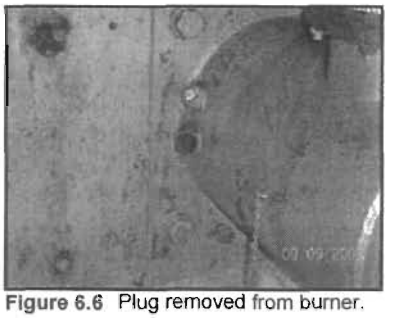


Figure 6.6 Plug removed from burner.

Step 6 - Lighting the Soak Zone: Cold Reheat Furnace (Continued)

7. Stick a lit torch in this hole and slowly open the main valve to this burner.

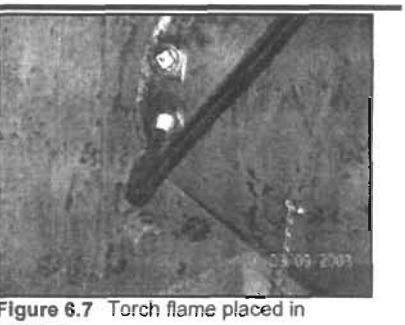


Figure 6.7 Torch flame placed in opening.

8. Watch and listen for this burner to light. When it does, you will hear it and see the light of the flame in the pilot window below the burner.

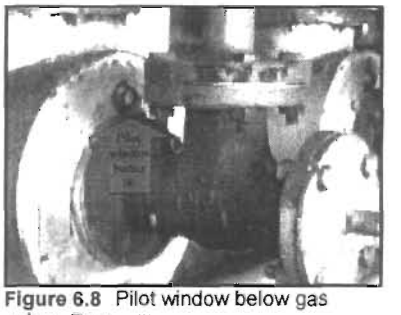


Figure 6.8 Pilot window below gas valve. Burner lit.

9. Remove torch and open the valve the rest of the way.

10. Now SLOWLY open valve # 7. Stop opening it as soon as you hear the gas flowing through it.

11. Watch and listen for this burner to light. When it does, you will hear it and see the light of the flame in the pilot window above the burner.

12. Once this burner is lit, SLOWLY open the valve the rest of the way.

Step 6 - Lighting the Soak Zone: Cold Reheat Furnace (Continued)

13. Repeat this process for the rest of the twelve gas valves. Only open a valve that is right next to another lit burner. Ensure that all burners are lit by verifying the flame in the window above each burner.

14. If the burners won't light just by opening the valves next to a burner that is lit, the burner will have to be lit with a torch.
Repeat substeps 5 through 9 above to light any burners that won't light.

Step 7 - Locate and open the Soak Zone Lance Gas Valve

1. Warning!! Do not open this valve until all of the Soak Zone Burners are lit!
This valve supplies gas to the center of all twelve burners to help the combustion when the furnace is operating in low-fire profiles. Opening this valve will supply gas to all of the burners independent of the burner valves. This can be very dangerous if opened too soon.

2. Locate the small gas valve between valves seven and eight counting from the south end. There will be a detachable handle hanging next to the valve.

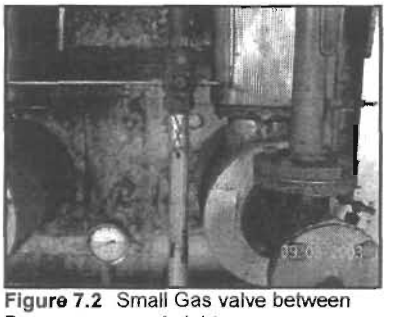


Figure 7.2 Small Gas valve between Burner seven and eight.

3. Place the handle on the valve.

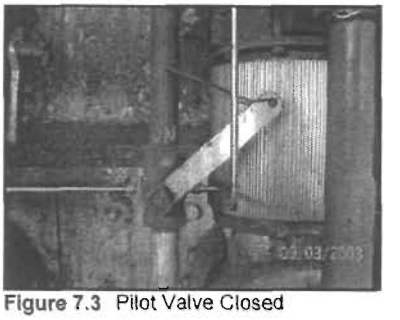


Figure 7.3 Pilot Valve Closed

Step 7 - Locate and open the Soak Zone Lance Gas Valve (Continued)

4. Rotate the handle Couterclockwise to open this valve. It will only pivot 90 degrees.

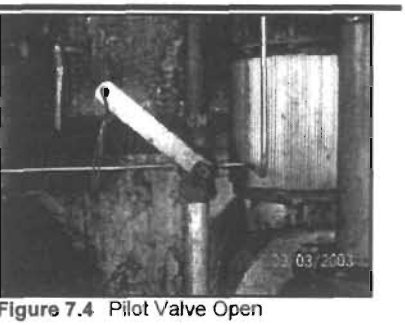


Figure 7.4 Pilot Valve Open

5. Remove the handle and hang it back on the valve.

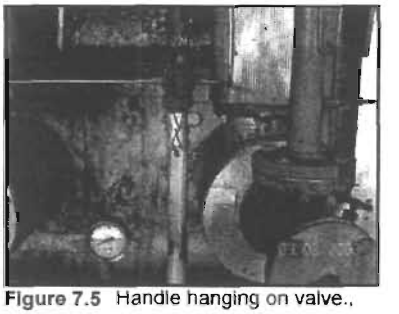


Figure 7.5 Handle hanging on valve.,

Step 8 - Return to P-1

1. Close the Peel Bar Door and the Discharge Door.
2. Select the Soak Zone Temperature Controller on the Level 1 monitor.
3. Place the Air Flow PID in Auto. This is important. ALWAYS PLACE THE AIR FLOW PID IN AUTO FIRST
4. Place the Gas Flow PID in Auto.
5. The Temperature TIC should still be in Manual and at the 35% setting. Leave it in Manual and set it to match the SP percent of the Gas Flow PID
   Ex. In the Gas Flow PID column look for the SP (Setpoint) that is read in percent. If it reads for example, 20.99 then set the Temperature TIC output to 21%
   It is important to set the Temperature TIC to match the output of the Gas Flow PID in order to keep the stack from smoking.

Step 8 - Return to P-1 (Continued)

6. Once the Temperature TIC is set, monitor the temperature of the Soak Zone. It will increase to a point and then it will stop climbing, as you only have 21% output selected.
Once it stops climbing increase the Output of the Temperature TIC by 10% increments until the Soak Zone is at 2000 degrees. This process of heating a cold furnace Soak Zone up to 2000 degrees can take better than three hours. So each time you increase the Soak Zone temperature TIC by 10% increments it can take 15 to 20 minutes for the temperature to climb and level out.
Once the Soak Zone is at 2000 degrees, light the Heat zone.

Step 9 - Lighting the Heat Zone.

1. Lighting the Heat Zone requires going on top of the Reheat Furnace. THIS IS A 'NO LONE ZONE'! IT REQUIRES TWO PEOPLE AT ALL TIMES TO GO ON TOP OF THE FURNACE.
This area is extremely hot, and to fall can cause serious injury.
Also, beware of the movement of the cranes in the area.

2. With a second employee, access the top of the Furnace via the staircase on the east side of the Reheat Furnace.

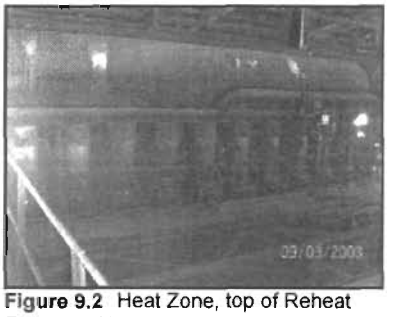


Figure 9.2 Heat Zone, top of Reheat Furnace. No Lone Zone!

3. Starting with the fifth burner form the south end of the furnace, slowly open the valve until the burner lights.

Step 9 - Lighting the Heat Zone. (Continued)

4. Verify this by seeing the flame in the pilot window above the burner.

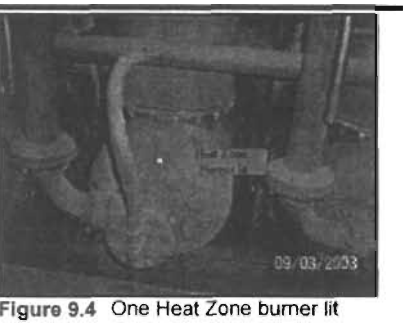


Figure 9.4 One Heat Zone burner lit

5. Repeat this process on the rest of the ten burners until they are all lit. Only light a burner that is next to one that is already lit. This will help ensure that they are all lighting properly.

Step 10 - Locate and open the Heat Zone Lance Gas valve.

1. Locate the small gas valve between valves eight and nine counting from the south end. There will be a detachable handle hanging next to the valve. This is the Lance Gas valve, As in the Soak Zone, this valve provides gas to the center of all ten Heat Zone burners. And it must not be opened until all ten Heat Zone burners are lit.

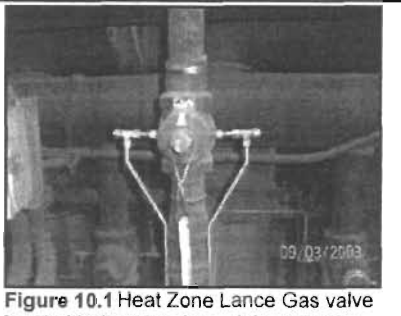


Figure 10.1 Heat Zone Lance Gas valve located between valves eight and nine.

2. Place the handle on the valve.

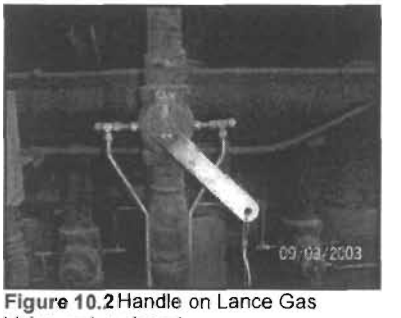


Figure 10.2 Handle on Lance Gas Valve, valve closed.

Step 10 - Locate and open the Heat Zone Lance Gas valve. (Continued)

3. Rotate the handle Couterclockwise to open this valve. It will only pivot 90 degrees.

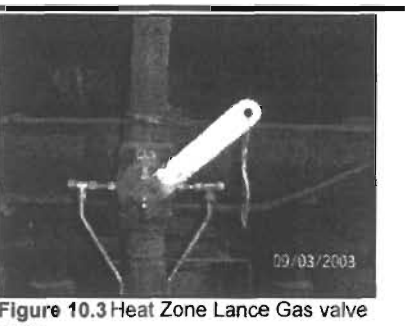


Figure 10.3 Heat Zone Lance Gas valve open.

4. Remove the handle and hang it back on the valve.

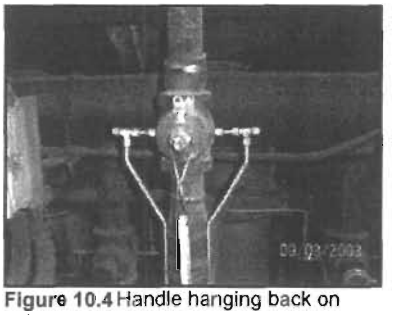


Figure 10.4 Handle hanging back on valve

5. The Heat Zone is now lit, exit the top of the Reheat Furnace.

6. Return to the P-1 Pulpit

Step 11 - Check / set the Controls in P-1 for the Heat Zone.

1. Select Heat Temp F6 from the menu at the bottom of the Furnace Overview screen on the Level 1 control. This will bring up the Heat Zone Temperature Controller screen.

2. On the Heat Zone Temperature Controller screen, ensure that the following PID loops are in Auto
   Air Flow PID
   Gas Flow PID
   Air / Fuel Ratio
   If they are not in Auto, place them in Auto.

3. On the same screen, place the Temperature TIC in Manual.

4. Increase the output to 20% and leave it in Manual.

Step 11 - Check / set the Controls in P-1 for the Heat Zone. (Continued)

5. Monitor the Heat Zone Temperature, when it reaches 1800 degrees, raise the output to 40%.
6. Monitor the Heat Zone Temperature, when it reaches 2000 degrees, select Auto.
7. Set the Heat Zone Temperature TIC SETPOINT at 2000.

Step 12 - Place Soak Zone in Auto

1. Select the Soak Zone Temperature Controller from the Level 1 monitor.
2. Place the Soak Zone Temperature TIC in Auto.
3. Set the Soak Zone Temperature TIC SETPOINT to 2100.
4. Both Zones of the furnace are now in Auto. Refer to Routine Procedure 8482550-RP-010, Reheat Furnace Operation Auto / Manual. Use this to operate the Furnace in Auto / Manual operation.

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   Slag Processing Operation

3. Emissions Unit Identification Number: **003**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**Oct 03**	**3390**	☐ Yes ☒ No

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    Slag recycling process includes screening, crushing, and sizing operations.

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:
Wet suppression - watering of piles and operation to suppress fugitive particulate emissions.

Unconfined PM emissions shall be controlled by using reasonable precautions Rule 62-296.320(4)(c), FAC, and Rule 2.1001, JEPB

2. Control Device or Method Code(s): **143**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **100 TPH**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **5** hours/day **52** weeks/year	**7** days/week **2,000** hours/year
6. Operating Capacity/Schedule Comment: **100 tons per hour** **500 tons per day** **85,000 tons per year**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **003**		2. Emission Point Type Code:
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Fugitive PM emissions**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **F**	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: 77°F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: **10** feet
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: 0
8. Calculation of Emissions:	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Reasonable Precautions**	
5. Visible Emissions Comment: **Rule 62-296.320 F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation _ of _

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:.	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor __ of _

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor __ of _

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **GA-F1-C2** ☐ Previously Submitted, Date ____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☐ Previously Submitted, Date ____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☐ Previously Submitted, Date ____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☐ Previously Submitted, Date ____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☐ Previously Submitted, Date ____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: ____
   Test Date(s)/Pollutant(s) Tested: ____
   ____
   ☐ Previously Submitted, Date: ____
   Test Date(s)/Pollutant(s) Tested: ____
   ____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: ____
   ____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   ☐ Attached, Document ID: ____ ☒ Not Applicable

EMISSIONS UNIT INFORMATION
Section [3] of [4]
Slag Processing Operation

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **GA-EU1-C7** ☐ Not Applicable
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID: _____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☒ Not Applicable

EMISSIONS UNIT INFORMATION
Section [3] of [4]
Slag Processing Operation

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   Melt Shop Building

3. Emissions Unit Identification Number: **004**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A			**3390**	☐ Yes ☒ No

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    The melt shop houses the EAF and continuous caster.

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:
2. Control Device or Method Code(s):

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,500** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **004**	2. Emission Point Type Code:	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Fugitive PM emissions**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **F**	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: 77°F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: **100** feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **0**
8. Calculation of Emissions:	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE6**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **6 %** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9.**	
5. Visible Emissions Comment: **40 CFR 60.272a, Rule 62-212.400(5), FAC.**	

Visible Emissions Limitation: Visible Emissions Limitation _ of _

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:.	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor _ of _

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor __ of _

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **GA-F1-C2** ☐ Previously Submitted, Date ____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☐ Previously Submitted, Date ____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☐ Previously Submitted, Date ____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☐ Previously Submitted, Date ____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☐ Previously Submitted, Date ____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: ____
   Test Date(s)/Pollutant(s) Tested: ____
   ____
   ☐ Previously Submitted, Date: ____
   Test Date(s)/Pollutant(s) Tested: ____
   ____
   ☐ To be Submitted, Date (if known): ____
   Test Date(s)/Pollutant(s) Tested: ____
   ____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   ☐ Attached, Document ID: ____ ☒ Not Applicable

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
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2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID: _____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☒ Not Applicable

Additional Requirements Comment