STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Gerdau Ameristeel
16770 Rebar Road
Baldwin, Florida 32234

Air Permit No. 0310157-009-AC
PSD Permit No. PSD-FL-349B
Jacksonville Steel Mill
Authorization to Use Tires as a
Carbon Source in Steel Making

Authorized Representative:
Mr. Donald R. Shumake, Vice President and General Manager

Enclosed is the Final Air Permit No. 0310157-009-AC, which authorizes the use of tires (shredded or whole) as a carbon source for steel making in the new electric arc furnace (EU-008), which is currently under construction (0310157-007-AC/PSD-FL-349) and located at Gerdau Ameristeel's existing facility, 16770 Rebar Road, Baldwin, Duval County, Florida. This permit is issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order (permit) has the right to seek judicial review of the permit (letter) pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, 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 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

Trina L. Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Determination and the Final Permit) was sent electronically (received receipt requested) before the close of business on 4/9/07 to the persons listed or as otherwise noted:

Mr. Donald R. Shumake, Gerdau Ameristeel (shumake@gerdauameristeel.com)
Mr. James P. Wold, Gerdau Ameristeel (jwold@gerdauameristeel.com)
Mr. Richard Robinson, ERMD-EQD (ROBINSON@coj.net)
Mr. Scott A. McCann, Golder Associates, Inc. (smccann@golder.com)
Mr. David LaRocca, Golder Associates, Inc. (DLaRocca@golder.com)
Mr. Jim Little, USEPA Region 4 (little.james@epa.gov)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(Clerk) 4/9/07 (Date)

Final Determination

Gerdau Ameristeel
Jacksonville Steel Mill

Air Construction Permit No.: 0310157-009-AC

Duval County

An Intent to Issue an Air Construction Permit was issued to Gerdau Ameristeel on March 6, 2007. The permit authorizes the use of tires (shredded or whole) as a carbon source for steel making in the new electric arc furnace (EU-008), which is currently under construction (0310157-007-AC/PSD-FL-349) at the existing Jacksonville Steel Mill, 16770 Rebar Road, Baldwin, Duval County. The Public Notice of Intent to Issue an Air Construction Permit was published in The Florida Times-Union on March 15, 2007. The Draft Air Construction Permit was available for public inspection at the Duval County's Environmental Resource Management-Air Quality Division's office in Jacksonville and the permitting authority's office in Tallahassee. Proof of publication of the Public Notice of Intent to Issue an Air Construction Permit was received on March 29, 2007.

There were no comments received during the Public Notice period. Therefore, it is recommended that the Final Air Construction Permit be issued as noticed.

INTEROFFICE MEMORANDUM

TO: Joe Kahn

THRU: Trina Vielhauer

THRU: Jeff Koerner

FROM: Bruce Mitchell

DATE: April 4, 2007

SUBJECT: Gerdau Ameristeel
Jacksonville Steel Mill
Air Construction Permit
Permit Project No. 0310157-009-AC/PSD-FL-349B
Use of Tires as a Carbon Source in Steel Making in the New Electric Arc Furnace.

Attached is the Final Air Construction Permit for Gerdau Ameristeel's existing Jacksonville Steel Mill, located at 16770 Rebar Road, Jacksonville, Duval County, Florida. The Air Construction Permit is being issued to authorize Gerdau Ameristeel to use tires as a carbon source for steel making in the new electric arc furnace, which is currently under construction (0310157-007-AC/PSD-FL-349). Only permit conditions Nos. B.4.a.1. and B.32.b. were revised.

Attachments

JK/tlv/jfk/bm

Joe -
Since they aren't done w/ initial PSD permits construction, we updated PSD permit instead of letter mod.
Trina

Gerdau Ameristeel
Jacksonville Steel Mill

Facility ID No. 0310157
Duval County

Air Construction Permit Project No. 0310157-009-AC
PSD Permit Project No. PSD-FL-349B
{Revises Permit Nos. 0310157-008-AC and PSD-FL-349A}

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114
Fax: 850/922-6979
Fax: 850/921-9533

Compliance Authority:
Environmental Resource Management Department
Environmental Quality Division
117 West Duval Street, Suite 225
Jacksonville, Florida 32202
Telephone: (904)630-4900
Fax: (904)630-3638

Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

PERMITTEE:
Gerdau Ameristeel
16770 Rebar Road
Baldwin, FL 32234

Authorized Representative:
Mr. Donald Shumake, V.P. and General Manager

Permit No. 0310157-009-AC
PSD Permit No. PSD-FL-349B
Facility ID No. 0310157
Expiration Date: September 28, 2008
Project: Modernization Project
(Modification for Tires)

Facility Description

Gerdau Ameristeel operates the existing Jacksonville Steel Mill (SIC No. 3390), which is located at 16770 Rebar Road in Baldwin, Duval County, Florida. The plant is a secondary metal production facility that recycles scrap iron and steel. The map coordinates are: UTM Zone 17, 405.7 km East, 3350.2 km North; Latitude: 30° 16' 52" / Longitude: 81° 58' 50".

Project Description

On September 21, 2005, the Department of Environmental Protection (Department) issued Permit No. 0310157-007-AC (PSD-FL-349) to modernize the plant by constructing a new melt shop, a new electric arc furnace (EAF), a new ladle metallurgical furnace (LMF), and a new billet reheat furnace (BRF). The project was subject to preconstruction review in accordance with the Prevention of Significant Deterioration (PSD) of Air Quality. The PSD permit for the modernization project resulted in determinations of the Best Available Control Technology (BACT) for carbon monoxide (CO), nitrogen oxides (NO_X), particulate matter (PM/PM_{10}), sulfur dioxide (SO_2) and volatile organic compounds (VOC). On May 5, 2006, the Department issued Permit No. 0310157-008-AC/PSD-FL-349A to modify the PSD permit by authorizing construction of a new gas-fired BRF to allow for the simultaneous processing of steel billets. The existing BRF will be dedicated to producing rebar and the new BRF will be dedicated to producing wire or rod.

For this new PSD permit modification, the Department authorizes the use of shredded or whole tires as a source of carbon in the EAF and as an alternative to petroleum coke. The use of tires as a carbon source in steel production has been proven within the industry. After completing construction on the new EAF, this permit modification requires separate sets of performance tests for petroleum coke and tires. The permittee is required to demonstrate compliance with all permit limits associated with the new EAF under both scenarios.

Referenced attachments made a part of this permit:
Appendix SS-1, Stack Sampling Facilities
Table 297.310-1, Calibration Schedule
Attachment, 40 CFR 60, Subpart A
Figure 1, Summary Report of Gaseous and Opacity Excess Emissions and Monitoring Systems Performance Report

Joseph Kahn, Director
Division of Air Resource Management

4/6/07
(Date)

JK/tlv/jk/bm

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does no relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permitted to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

a. Have access to and copy any record that must be kept under the conditions of the permit;
b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

a. A description of and cause of non-compliance; and,
b. The period of non-compliance, including dates and times; or, if not corrected, the anticipated time the non- compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

GENERAL CONDITIONS:

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:
    (x) Determination of Best Available Control Technology (BACT)
    (x) Determination of Prevention of Significant Deterioration (PSD)
    (x) Compliance with New Source Performance Standards (NSPS)
    ( ) Compliance with National Emission Standards for Hazardous Air Pollutants/ Maximum Available Control Technology (MACT)

14. The permittee shall comply with the following:
    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
    c. Records of monitoring information shall include:
        - the date, exact place, and time of sampling or measurements;
        - the person responsible for performing the sampling or measurement;
        - the dates analyses were performed;
        - the person responsible for performing the analyses;
        - the analytical techniques or methods used; and
        - the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

A. The following specific conditions apply facility-wide:

1. 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), F.A.C.; and, Rule 2.1001, JEPB]

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 20 percent opacity in accordance with Rule 62-296.320(4)(b)1., F.A.C., and Rule 2.1001, JEPB. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C., and Rule 2.1101, JEPB. Testing shall be required upon request of the Department.
[Rule 62-296.320(4)(b)1., F.A.C.; and, Rule 2.1101, JEPB]

3. 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), F.A.C.; and, Rule 2.1001, JEPB]

4. 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), F.A.C.; and, Rules 2.501 and 2.1301, JEPB]

5. Unconfined Particulate Matter Emissions. Unconfined particulate matter emissions from yard operations, open stock piling of materials and/or materials handling operations, such as the slag handling operations (including, but not limited to, screening, crushing, and sizing operations of steel slag), shall be controlled by using the following reasonable precautions when visible emissions are equal to or greater than 20 percent opacity.
a. Reduced speed for vehicular traffic in the plant to 5 miles per hour.
b. Use of liquid resinous adhesives or other liquid (water) dust suppressants or wetting agents.
c. Use of paving or other asphaltic materials.
d. Removal of particulate matter from paved roads and/or other paved areas by vacuum cleaning or otherwise by wetting prior to sweeping.
e. Covering of trucks, trailers, front end loaders, and other vehicles or containers to prevent spillage of particulate matter during transport.
f. Use of mulch, hydroseeding, grassing, and/or other vegetative ground cover on barren areas to prevent or reduce particulate matter from being windblown.
g. Use of hoods, fans, filters, and similar equipment to contain, capture, and vent particulate matter.
h. Enclosures or covering of conveyor systems.
[Rules 62-296.320(4)(b) & (c)2., F.A.C.; 0310157-004-AC/PSD-FL-261; Rule 2.1001, JEPB; and, 0310157-007-AC/PSD-FL-349]

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

Environmental Resource Management Department
Environmental Quality Division
117 West Duval Street, Suite 225
Jacksonville, FL 32202
Telephone: 904/630-4900
Fax: 904/630-3638

7. 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, Pesticides & Toxics Management Division
Air & EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, GA 30303-8960
Telephone: (404) 562-9155
Fax: (404) 562-9163

8. 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].

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

10. Construction and Expiration: The permit expiration date includes sufficient time to complete construction, perform required testing, submit test reports, and submit an application for a Title V operation permit to the Department. Approval to construct shall become invalid for any of the following reasons: construction is not commenced within 18 months after issuance of this permit; construction is discontinued for a period of 18 months or more; or construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. In conjunction with an extension of the 18-month period to commence or continue construction (or to construct the project in phases), the Department may require the permittee to demonstrate the adequacy of any previous determination of Best Available Control Technology (BACT) for emissions units regulated by the project. For good cause, the permittee may request that this PSD air construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit.
[Rules 62-4.070(4), 62-4.080, 62-210.300(1), and 62-212.400(6)(b), F.A.C.; 40 CFR 52.21(r)(2); 40 CFR 51.166(j)(4)]

11. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.
[Rule 62-4.080, F.A.C.]

12. Relaxations of Restrictions on Pollutant Emitting Capacity. If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7,1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it.
[Rule 62-212.400(2)(g), F.A.C.]

13. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification.
[Rule 62-4.030 and Chapters 62-210 and 62-212, F.A.C.]

14. Title V Air Operation Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions units. The permittee shall apply for a Title V air operation permit at least 180 days (**March 24, 2008**) prior to expiration of this permit, but no later than 180 days after commencing operation, whichever occurs first. To apply for a Title V air operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the ERMD-EQD office.
[Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

B. New Melt Shop Building and EAF (Electric Arc Furnace) Operations and New Continuous Caster Building and LMF (Ladle Metallurgical Furnace) Operations with a New No. 5 Baghouse Control System Serving Its Dust-Handling System and the EAF and LMF Operations: Emissions Units Nos. 008 and 010.

Emissions Unit Descriptions: A new Melt Shop Building will be built along with a new electric arc furnace (EAF) for processing recycled scrap-based steel; and, a new Continuous Caster Building will be built to include the continuous caster operations and the new LMF operations, which will be used for refining the tapped (liquid) steel received from the EAF. Emissions of particulate matter (both PM and PM_{10}) and visible emissions from the EAF's and LMF's operations will be controlled by a new No. 5 baghouse control system. The new No. 5 baghouse control system will also be used to control its associated dust-handling system. Heat will be provided by natural gas fired through low-NO_x oxy-fuel sidewall burners (LNBs) and with electric arcs from carbon electrodes.

Emissions Control: Proper engineering design; firing of natural gas; low-NO_x oxy-fuel sidewall burners (LNBs); low excess air; good combustion practice; a new baghouse control system, designated as Baghouse No. 5, and associated canopy hoods with duct work; Direct-Shell Evacuation Control (DEC) systems (EAF's and LMF's); and, usage of a scrap management plan.

Definitions: 40 CFR 60, Subpart AAa.
a. Electric arc furnace (EAF): means a furnace that produces molten steel and heats the charge materials with electric arcs from carbon electrodes; and, an EAF shall consist of the furnace shell and roof and the transformer.
b. Ladle metallurgical furnace (LMF): means an EAF that does the final refining of the molten steel that it receives from the EAF.
c. Charge: means the addition of iron and steel scrap or other materials into the top of an electric arc furnace.
d. Heat cycle: means the period beginning when scrap is charged to an empty EAF and ending when the EAF tap is completed.
e. Tap: means the pouring of molten steel from an EAF.
f. Dust-handling system: means the equipment used to handle particulate matter collected by the control device for an EAF and consists of the control device dust hoppers, the dust-conveying equipment, any central dust storage equipment, the dust-treating equipment (e.g., pug mill, pelletizer), dust transfer equipment (from storage to truck), and any secondary control devices used with the dust transfer equipment.
g. Refining: means that phase of the steel production cycle during which undesirable elements are removed from the molten steel and alloys are added to reach the final metal chemistry.
h. Direct-shell evacuation control system (DEC system): means a system that maintains a negative pressure within the EAF (and LMF) above the slag or metal and ducts emissions to the control device.
i. Bag leak detection system: means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse to detect bag leaks and other conditions that result in increases in particulate loadings. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, electrodynamic, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

The following specific conditions apply to the emission units described above.

General.

B.0. Post-Construction.
a. The installation of an EAF, a LMF, a continuous caster, DECs, canopy hoods and a baghouse control system No. 5., was authorized in air construction permit (AC), No. 0310157-007-AC/PSD-FL-349, issued September 21, 2005. The construction shall be in accordance with the application and associated documents provided to the Permitting Authority for the issuance of that AC. Any changes to the project that are contrary to those documents and permit shall be reported in writing to the Permitting Authority by the P.E. of Record.
[Rules 62-4.070(3) and 62-4.160(2), F.A.C.]

b. The existing EAF shall be removed from service upon commissioning and establishing normal operation of the new EAF and the initial performance tests have been conducted satisfactorily pursuant to 40 CFR 60.8 and the conditions of this permit.

The existing LMF shall be removed from service upon commissioning and establishing normal operation of the new LMF and the initial performance tests have been conducted satisfactorily pursuant to 40 CFR 60.8 and the conditions of this permit. A letter shall be sent to the City of Jacksonville's Environmental Resource Management Department – Environmental Quality Division (ERMD-EQD) and the Department's Northeast District (NED) offices upon completion of this specific condition. [Rules 62-4.070(3) and 62-212.400(5) & (6), F.A.C.; and, 0310157-007-AC/PSD-FL-349]

B.1.a. 40 CFR 60, Subpart AAa, Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels, shall apply to the emissions units described herein.
b. 40 CFR 60, Subpart A, General Provisions, shall apply to the emissions units described herein.
[Rule 62-204.800, F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60, Subparts A and AAa]

B.2. The owner and operator shall abide by the scrap management plan attached to the permit (see Gerdau Ameristeel: Scrap Receiving Policy and Procedures). The owner or operator shall update this plan as necessary through the Title V air operation permit approval process.
[Rule 62-4.070(3), F.A.C.]

Essential Potential to Emit (PTE) Parameters.

B.3. The maximum heat inputs shall not exceed the following :
a. EAF: 34.6×10^6 Btu per hour firing natural gas.
b. LMF: 34.6×10^6 Btu per hour firing natural gas.
[Rules 62-210.200(PTE) and 62-212.400(5), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.4. Permitted Capacity. The production rates shall not exceed any of the following:
a. EAF:
1. 176 tons of raw materials (scrap steel, fluxes, alloys, carbon source (petroleum coke or tires), etc.) per hour, maximum daily average. (Note: The carbon source represents approximately 1% of the total charge.)
2. 160 tons of tapped steel (liquid) per hour, maximum daily average.
3. 140 billet tons of tapped steel (liquid) per hour, maximum monthly average.
4. 1,192,800 tons of tapped steel (liquid) during any consecutive 12 months.

b. LMF:
1. 160 tons of tapped steel (liquid) per hour, maximum daily average.

[Rules 62-210.200(PTE) and 62-212.400(5), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.5. The allowable hours of operation shall not exceed the following:
a. EAF: 8,520 hours per year.
b. LMF: 8,520 hours per year.
[Rules 62-210.200(PTE) and 62-212.400(5), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

Emission Limitations and Standards.

B.6. Best Available Control Technology Determination.

The following table shows the BACT emission limits, control technology, and test methods determined by the Department for the new EAF and LMF operations:

Pollutant	Emission Limits [1]	Control Technology	Test Methods [2 and 3]
PM as PM/PM_{10}	0.0018 gr/dscf	Direct-shell evacuation control (DEC) systems (fourth hole vent with O_2); and, canopy hoods and new No. 5 baghouse control system	EPA Reference Method 5 40 CFR 60, Appendix A
NO_x	0.33 lb/ton tapped steel	Low-NO_x oxy-fuel sidewall burners (LNBs) and furnace pressure control (good combustion practices – low excess air by the DEC systems)	EPA Reference Method 7, 7A or 7E; 40 CFR 60, Appendix A
SO_2	0.2 lb/ton tapped steel	Scrap management plan and supplemental firing of natural gas	EPA Reference Method 8 40 CFR 60, Appendix A
CO	2.0 lbs/ton tapped steel	DEC systems; and, proper design, operation and control of the combustion process	EPA Reference Method 10 40 CFR 60, Appendix A
VOCs	0.13 lb/ton tapped steel	DEC systems; proper design, operation and control of the combustion process; and, usage of a scrap management plan	EPA Reference Method 18, 25 or 25A 40 CFR 60, Appendix A
Visible Emissions	<3% Opacity: No. 5 baghouse control system <6% Opacity: Melt Shop Roof and Continuous Caster Building Roof	No. 5 baghouse control system and associated roof canopy hoods; and, usage of the associated DEC systems	EPA Reference Method 9 40 CFR 60, Appendix A
Visible Emissions	<10% Opacity: Miscellaneous pickup and transfer points along the dust-handling system for the No. 5 baghouse control system	No. 5 baghouse control system	EPA Reference Method 9 40 CFR 60, Appendix A

[1] Unless otherwise specified, the averaging time for each limit shall be in accordance with the test method.

[2] For the EAF and LMF operations, the sampling time and sample volume of each PM test run shall be at least 4 hours and 160 dscf, respectively, and the sampling time shall include an integral number of heats. Compliance with the CO standard shall be based on the average of three (3) 3-hour test runs.
[Rule 62-204.800, F.A.C., and 40 CFR 60.275a(e)(1)]

[3] Compliance tests on the EAF and LMF operations shall be conducted at a minimum production rate of 144 tons per hour (TPH) tapped steel per Rules 62-297.310(2) & (2)(b), F.A.C. [160 TPH x 90% = 144 TPH tapped steel]

B.7. Particulate matter (PM/PM_{10}) emissions shall not exceed 0.0018 grains per dry standard cubic foot (gr/dscf), 12.88 lbs/hr, and 54.9 TPY from the combined operations of the EAF and LMF, including the dust-handling system, based on the average of three (3) test runs conducted in accordance with EPA Reference Method 5 (as described in 40 CFR 60, Appendix A) and consistent with the requirements of 40 CFR 60.275a(e)(1). (See specific condition **B.33.**)
[Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.8. Visible Emissions (VE).
a. VE from the control device, the No. 5 baghouse control system, shall be less than 3 percent opacity.
[40 CFR 60.272a(a)(2); Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

b. VE from any opening in the melt shop building or continuous caster building shall be less than 6 percent opacity.
[40 CFR 60.272a(a)(3); Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

c. VE from any pickup points along the dust-handling system connected with the No. 5 baghouse control system shall be less than 10 percent opacity. Such points include the baghouse hoppers, enclosed screw conveyors or enclosed chain/paddle conveyors, dust silo building, and the enclosed loading building for the truck and rail load-out operations.
[40 CFR 60.272a(b); Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.9. Carbon monoxide (CO) emissions shall not exceed 2.0 lbs/ton of steel, 320.0 pounds per hour, and 1,192.80 TPY from the combined operations of the EAF and LMF, based on the average of three (3) 3-hour test runs conducted in accordance with EPA Reference Method 10 (as described in 40 CFR 60, Appendix A).
[Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.10. Nitrogen oxides (NO_x) emissions shall not exceed 0.33 lb/ton of steel, 52.8 lbs/hr, and 196.8 TPY from the combined operations of the EAF and LMF, based on the average of three (3) test runs conducted in accordance with EPA Reference Method 7, 7A or 7E (as described in 40 CFR 60, Appendix A).
[Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.11. Volatile organic compounds (VOC) emissions shall not exceed 0.13 lb/ton of steel, 20.8 lbs/hr, and 77.5 TPY from the combined operations of the EAF and LMF, based on the average of three (3) test runs conducted in accordance with EPA Reference Method 18, 25, or 25A (as described in 40 CFR 60, Appendix A).
[Rule 62-212.400(1), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.12. Lead (Pb) emissions shall not exceed 0.00195 lb/ton of steel produced, 0.312 lb/hr, and 1.163 TPY from the combined operations of the EAF and LMF, based on the average of three (3) test runs conducted in accordance with EPA Reference Method 12 (as described in 40 CFR 60, Appendix A).
[Rules 62-4.070(3) and 62-212.400(1), (2)(d)4. and (2)(g) , F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

Excess Emissions

B.13. Excess emissions resulting from startup, shutdown or malfunction of any emissions 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.
[Rule 62-210.700(1), F.A.C.; and, Part III, Rule 2.301, JEPB]

B.14. 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.
[Rule 62-210.700(4), F.A.C.; and, Part III, Rule 2.301, JEPB]

Emissions Monitoring.

B.15. Observations of the opacity of the visible emissions from the control device shall be performed by a certified visible emission observer in accordance with 40 CFR 60.273a(c). Visible emission observations shall be conducted at least once per day for at least three 6-minute periods when the furnace is operating in the melting and refining period. All visible emission observations shall be conducted in accordance with EPA Reference Method 9. If visible emissions occur from more than one point, the opacity shall be recorded for any points where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In that case, the EPA Reference Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of the emission limit specified in 40 CFR 60.272a(a). "Furnace" means the EAF (melting) and the LMF (refining).
[40 CFR 60.273a(c); and, Rule 2.201, JEPB]

B.16. A furnace static pressure monitoring device is not required on the EAF nor the LMF because each is equipped with a DEC system. Observations of shop opacity shall be performed by a certified visible emission observer as follows: Shop opacity observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with EPA Reference Method 9. Shop opacity shall be recorded for any point(s) where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of

visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. "Shop" shall include both the melt shop building and the continuous caster building; and, "furnace" means the EAF (melting) and the LMF (refining).
[40 CFR 60.273a(d); and, Rule 2.201, JEPB]

B.17. A bag leak detection system must be installed and continuously operated on the No. 5 Baghouse control system because the owner or operator elected not to install and operate a continuous opacity monitoring system as provided for under 40 CFR 60.273a(c). In addition, the owner or operator shall meet the visible emissions observation requirements in 40 CFR 60.273a(c) (see specific condition **B.15.**). The bag leak detection system must meet the specifications and requirements of 40 CFR 60.273a(e)(1) through (8).
(1) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less.
(2) The bag leak detection system sensor must provide output of relative particulate matter loadings and the owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger.)
(3) The bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate loading is detected over the alarm set point established according to 40 CFR 60.273a(e)(4), and the alarm must be located such that it can be heard by the appropriate plant personnel.
(4) For each bag leak detection system required by 40 CFR 60.273a(e), the owner or operator shall develop and submit to the permitting authority, for approval, a site-specific monitoring plan that addresses the items identified in paragraphs (i) through (v) of 40 CFR 60.273a(e)(4). For each bag leak detection system that operates based on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). The owner or operator shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following:
(i) Installation of the bag leak detection system;
(ii) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established;
(iii) Operation of the bag leak detection system including quality assurance procedures;
(iv) How the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list; and,
(v) How the bag leak detection system output shall be recorded and stored.
(5) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time (if applicable).
(6) Following initial adjustment, the owner or operator shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the permitting authority except as provided for in 40 CFR 60.273a(e)(6)(i) and (ii).
(i) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects including temperature and humidity according to the procedures identified in the site-specific monitoring plan required under 40 CFR 60.273a(e)(4).
(ii) If opacities greater than zero percent are observed over four consecutive 15-second observations during the daily opacity observations required under 40 CFR 60.273a(c) and the alarm on the bag leak detection system does not sound, the owner or operator shall lower the alarm set point on the bag leak detection system to a point where the alarm would have sounded during the period when the opacity observations were made.
(7) For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detection sensor must be installed downstream of the baghouse and upstream of any wet scrubber.
(8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
[40 CFR 60.273a(e)(1) thru (8)]

B.18. For the bag leak detection system installed according to 40 CFR 60.273a(e), the owner or operator shall initiate procedures to determine the cause of all alarms within 1 hour of an alarm. Except as provided for under 40 CFR 60.273a(g), the cause of the alarm must be alleviated within 3 hours of the time the alarm occurred by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to, the following:
(1) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in particulate emissions;
(2) Sealing off defective bags or filter media;
(3) Replacing defective bags or filter media or otherwise repairing the control device;

(4) Sealing off a defective baghouse compartment;
(5) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; and,
(6) Shutting down the process producing the particulate emissions.
[40 CFR 60.273a(f)]

B.19. In approving the site-specific monitoring plan required in 40 CFR 60.273a(e)(4), the compliance authority may allow owners or operators more than 3 hours to alleviate specific conditions that cause an alarm if the owner or operator identifies the condition that could lead to an alarm in the monitoring plan, adequately explains why it is not feasible to alleviate the condition within 3 hours of the time the alarm occurred, and demonstrates that the requested additional time will ensure alleviation of the condition as expeditiously as practicable.
[40 CFR 60.273a(g)]

Monitoring of Operations.

B.20. Determination of Process Variables.
(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

B.21. The owner or operator shall maintain records of the following information:
(1) All data obtained under 40 CFR 60.274a(b); and,
(2) All monthly operational status inspections performed under 40 CFR 60.274a(c).
[40 CFR 60.274a(a)]

B.22. Except as provided under 40 CFR 60.274a(e), the owner or operator shall check and record on a once-per-shift basis the furnace static pressure (if DEC system(s) is/are in use, and a furnace static pressure gauge is installed according to 40 CFR 60.274a(f)) and either: check and record the control system fan motor amperes and damper position on a once-per-shift basis; install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood; or install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet and check and record damper positions on a once-per-shift basis. The monitoring device(s) may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow rate monitoring device(s) shall have an accuracy of ±10 percent over its normal operating range and shall be calibrated according to the manufacturer's instructions. The compliance authority may require the owner or operator to demonstrate the accuracy of the monitoring device(s) relative to EPA Reference Methods 1 and 2 of Appendix A, 40 CFR 60. "Furnace" means both the EAF and the LMF.
[40 CFR 60.274a(b)]

B.23. When the owner or operator of an affected facility is required to demonstrate compliance with the standards under 40 CFR 60.272a(a)(3) and at any other time that the compliance authority may require (under section 114 of the CAA, as amended) either: the control system fan motor amperes and all damper positions, the volumetric flow rate through each separately ducted hood, or the volumetric flow rate at the control device inlet and all damper positions shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the affected facility subject to 40 CFR 60.274a(b). The owner or operator may petition the permitting authority for reestablishment of these parameters whenever the owner or operator can demonstrate to the permitting authority's satisfaction that the affected facility operating conditions upon which the parameters were previously established are no longer applicable. The values of these parameters as determined during the most recent demonstration of compliance shall be maintained at the appropriate level for each applicable period. Operation at other than baseline values may be subject to the requirements of 40 CFR 60.276a(c).
[40 CFR 60.274a(c)]

B.24. Except as provided under 40 CFR 60.274a(e), the owner or operator shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in duct-work or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be noted and proper maintenance performed.
[40 CFR 60.274a(d)]

B.25. The owner or operator may petition the permitting authority to approve any alternative to either the monitoring requirements specified in 40 CFR 60.274a(b) or the monthly operational status inspections specified in 40 CFR 60.274a(d) if the alternative will provide a continuous record of operation of each emission capture system.
[40 CFR 60.274a(e)]

B.26. Except as provided for under 40 CFR 60.273a(d), if emissions during any phase of the heat time are controlled by the use of a DEC system, the owner or operator shall install, calibrate, and maintain a monitoring device that allows the pressure in the free space inside the EAF and the LMF to be monitored. The pressure shall be recorded as 15-minute integrated averages. The monitoring device may be installed in any appropriate location in the EAF and the LMF or their DEC duct prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring device shall have an accuracy of ±5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions.
[40 CFR 60.274a(f)]

B.27. Except as provided for under 40 CFR 60.273a(d), when the owner or operator of an EAF and a LMF controlled by a DEC is required to demonstrate compliance with the standard under 40 CFR 60.272a(a)(3), and at any other time the Administrator may require (under section 114 of the Clean Air Act, as amended), the pressure in the free space inside the furnace shall be determined during the meltdown and refining period(s) using the monitoring device required under 40 CFR 60.274a(f). The owner or operator may petition the permitting authority for reestablishment of the pressure whenever the owner or operator can demonstrate to the permitting authority's satisfaction that the EAF and the LMF operating conditions upon which the pressures were previously established are no longer applicable. The pressure determined during the most recent demonstration of compliance shall be maintained at all times when the EAF and/or the LMF is operating in a meltdown and refining period. Operation at higher pressures may be considered by the compliance authority to be unacceptable operation and maintenance of the affected facility.
[40 CFR 60.274a(g)]

B.28. During any performance test required under 40 CFR 60.8, and for any report thereof required by 40 CFR 60.276a(f), or to determine compliance with 40 CFR 60.272a(a)(3), the owner or operator shall monitor the following information for all heats covered by the test:
(1) Charge weights and materials, and tap weights and materials;
(2) Heat times, including start and stop times, and a log of process operation, including periods of no operation during testing and the pressure inside an EAF and a LMF when direct-shell evacuation control systems are used;
(3) Control device operation log; and,
(4) Continuous opacity monitor or EPA Reference Method 9 data.
[40 CFR 60.274a(h)]

Test Methods and Procedures

B.29. During performance tests required in 40 CFR 60.8, the owner or operator shall not add gaseous diluents to the effluent gas stream after the fabric in any pressurized fabric filter collector, unless the amount of dilution is separately determined and considered in the determination of emissions.
[40 CFR 60.275a(a)]

B.30. When emissions from any EAF and/or LMF are combined with emissions from facilities not subject to the provisions of 40 CFR 60, Subpart AAa, but controlled by a common capture system and control device, the owner or operator shall use either or both of the following procedures during a performance test (see also 40 CFR 60.276a(e)):
(1) Determine compliance using the combined emissions.
(2) Use a method that is acceptable to the Administrator and that compensates for the emissions from the facilities not subject to the provisions of 40 CFR 60, Subpart AAa.
[40 CFR 60.275a(b)]

B.31. When emissions from any EAF and/or LMF are combined with emissions from facilities not subject to the provisions of 40 CFR 60, Subpart AAa, the owner or operator shall demonstrate compliance with 40 CFR 60.272(a)(3) based on emissions from only the affected facility(ies).
[40 CFR 60.275a(c)]

B.32. Initial Performance Tests.

a. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in Appendix A, 40 CFR 60, or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).
[40 CFR 60.275a(d)]

b. The permittee shall notify the Compliance Authority in writing of the date that the new EAF (EU-008) achieved the maximum production rate at which the affected facility will be operated pursuant to 40 CFR 60.8. Within 60 days after achieving the maximum production rate at which the EAF will be operated, but not later than 180 days after initial startup of the EAF, the permittee shall conduct the required performance tests to demonstrate compliance with the emissions standards for the EAF. Separate sets of initial tests shall be conducted for the following carbon sources: petroleum coke only; and used tires (shredded or whole) only. The initial performance tests shall be conducted at permitted capacity and shall not exceed the permitted capacities specified in this construction permit. During each set of performance tests, the permittee shall document and record the following:

1. Date performed and duration;
2. Liquid steel production;
3. EAF charging rate of all materials/constituents;
4. Sulfur content (percent by weight) of the petroleum coke used;
5. Volumetric flow rate (acfm and dscfm);
6. Flue gas moisture percent, oxygen content and temperature;
7. Continuous emissions monitoring systems (CEMS) data; and,
8. Any continuous monitoring systems (CMS) data required by permit.

The above information shall be summarized for each test run in the required test report.

[App. No. 0310157-009-AC; 40 CFR 60.8; and, Rules 62-4.070(3) and 62-297.310(2), (2)(b), (7)(a)1. & 8, F.A.C.]

B.33. The owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.272a as follows:
(1) EPA Reference Method 5 shall be used for negative-pressure fabric filters and other types of control devices and EPA Reference Method 5D shall be used for positive-pressure fabric filters to determine the particulate matter concentration and volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 4 hours and 4.50 dscm (160 dscf) and, when a single EAF and LMF are sampled, the sampling time shall include an integral number of heats.
(3) Method 9 and the procedures of 40 CFR 60.11 shall be used to determine opacity.
(4) To demonstrate compliance with 40 CFR 60.272a(a) (1), (2), and (3), the Method 9 test runs shall be conducted concurrently with the particulate matter test runs, unless inclement weather interferes.
[40 CFR 60.275a(e)(1), (3) and (4)]

B.34. To comply with 40 CFR 60.274a(c), (f), (g), and (h), the owner or operator shall obtain the information required in these paragraphs during the particulate matter runs. (see specific conditions **B.23.**, **B.26.**, **B.27.**, and **B.28.**, respectively)
[40 CFR 60.275a(f)]

B.35. Any control device subject to the provisions of 40 CFR 60, Subpart AAa, shall be designed and constructed to allow measurement of emissions using applicable test methods and procedures.
[40 CFR 60.275a(g)]

B.36. Where emissions from any EAF and/or LMF are combined with emissions from facilities not subject to the provisions of this subpart but controlled by a common capture system and control device, the owner or operator may use any of the following procedures during a performance test:
(1) Base compliance on control of the combined emissions;
(2) Utilize a method acceptable to the Administrator that compensates for the emissions from the facilities not subject to the provisions of 40 CFR 60, Subpart AAa; or,
(3) Any combination of the criteria of 40 CFR 60.275a(h)(1) and (h)(2).
[40 CFR 60.275a(h)]

B.37. Where emissions from any EAF and/or LMF are combined with emissions from facilities not subject to the provisions of 40 CFR 60, Subpart AAa, determinations of compliance with 40 CFR 60.272a(a)(3) will only be based upon emissions originating from the affected facility(ies).
[40 CFR 60.275a(i)]

B.38. Unless the presence of inclement weather makes concurrent testing infeasible, the owner or operator shall conduct concurrently the performance tests required under 40 CFR 60.8 to demonstrate compliance with 40 CFR 60.272a(a)(1), (2), and (3) of 40 CFR 60, Subpart AAa.
[40 CFR 60.275a(j)]

B.39. PM. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 5 (as described in 40 CFR 60, Appendix A) and 40 CFR 60.275a(e)(1) for PM. Tests shall be conducted initially and annually. (See specific condition **B.33.**)
[40 CFR 60.275(e)(1); Rules 62-212.400(BACT) and 62-297.310, F.A.C.; Rule 2.1101, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.40. VE. Testing for demonstration of compliance shall be performed concurrently with the PM test in accordance with EPA Reference Method 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity. (See specific condition **B.33.**)
[40 CFR 60.275(e)(4); Rule 62-297.310, F.A.C.; Rule 2.1101, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.41. CO. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 10 (as described in 40 CFR 60, Appendix A) for CO. Tests shall be conducted initially and annually.
[Rules 62-212.400(BACT) and 62-297.310, F.A.C.; Rule 2.1101, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.42. NO_x. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 7, 7A or 7E (as described in 40 CFR 60, Appendix A) for NO_x (as NO_2). Tests shall be conducted initially and annually.
[Rules 62-212.400(BACT) and 62-297.310, F.A.C.; Rule 2.1101, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.43. VOC. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 18, 25, or 25A (as described in 40 CFR 60, Appendix A) for VOC. Tests shall be conducted initially and annually.
[Rules 62-212.400(BACT) and 62-297.310, F.A.C.; Rule 2.1101, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.44. Pb. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 12 (as described in 40 CFR 60, Appendix A) for Pb. Tests shall be conducted initially and annually.
[Rules 62-212.400(2)(g) and 62-297.310, F.A.C.; Rule 2.1101, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.45. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day

period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

B.46. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted 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, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)(b), F.A.C.; Rule 2.1301, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.47. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

B.48. Applicable Test Procedures.
(a) Required Sampling Time.
1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached as part of this permit.
(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

B.49. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

B.50. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid fuel for more than 400 hours other than during startup.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the permitting authority shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

a. Did not operate; or

b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1– September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

a. Visible emissions, if there is an applicable standard;

b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and

c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

9. The owner or operator shall notify the ERMD-EQD and DEP-NED, at least 30 days prior to the initial NSPS performance test and 15 days prior to the date on which each subsequent formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the ERMD-EQD or DEP-NED, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the ERMD-EQD and DEP-NED.

[Rule 62-297.310(7), F.A.C.; Part XI, Rule 2.1101, JEPB; 40 CFR 60.8; and, SIP approved]

Recordkeeping and Reporting Requirements

B.51. Records of the measurements required in 40 CFR 60.274a must be retained for at least 5 years following the date of the measurement.

[40 CFR 60.276a(a); Rule 62-213.440(1)(b), F.A.C.; and, Rule 2.501, JEPB]

B.52. Each owner or operator shall submit a written report of exceedances of the control device opacity to the compliance authority semi-annually. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity is 3 percent or greater.

[40 CFR 60.276a(b)]

B.53. Operation at a furnace static pressure that exceeds the value established under 40 CFR 60.274a(g) and either operation of control system fan motor amperes at values exceeding ±15 percent of the value established under 40 CFR 60.274a(c) or operation at flow rates lower than those established under 40 CFR 60.274a(c) may be considered by the compliance authority to be unacceptable operation and maintenance of the affected facility. Operation at such values shall be reported to the compliance authority semiannually.

[40 CFR 60.276a(c)]

B.54. The requirements of 40 CFR 60.276a remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance

adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with this section, provided that they comply with the requirements established by the State.
[40 CFR 60.276a(d)]

B.55. When the owner or operator of an EAF and/or LMF are required to demonstrate compliance with the standard under 40 CFR 60.275a(b)(2) or a combination of (b)(1) and (b)(2), the owner or operator shall obtain approval from the permitting authority of the procedure(s) that will be used to determine compliance. Notification of the procedure(s) to be used must be postmarked at least 30 days prior to the performance test.
[40 CFR 60.276a(e)]

B.56. For the purpose of this subpart, the owner or operator shall conduct the demonstration of compliance with 40 CFR 60.272a(a) of this subpart and furnish the compliance authority a written report of the results of the test. This report shall include the following information:
(1) Facility name and address;
(2) Plant representative;
(3) Make and model of process, control device, and continuous monitoring equipment;
(4) Flow diagram of process and emission capture equipment including other equipment or process(es) ducted to the same control device;
(5) Rated (design) capacity of process equipment;
(6) Those data required under § 60.274a(h) of this subpart;
  (i) List of charge and tap weights and materials;
  (ii) Heat times and process log;
  (iii) Control device operation log; and
  (iv) Continuous monitor or Reference Method 9 data.
(7) Test dates and test times;
(8) Test company;
(9) Test company representative;
(10) Test observers from outside agency;
(11) Description of test methodology used, including any deviation from standard reference methods;
(12) Schematic of sampling location;
(13) Number of sampling points;
(14) Description of sampling equipment;
(15) Listing of sampling equipment calibrations and procedures;
(16) Field and laboratory data sheets;
(17) Description of sample recovery procedures;
(18) Sampling equipment leak check results;
(19) Description of quality assurance procedures;
(20) Description of analytical procedures;
(21) Notation of sample blank corrections; and,
(22) Sample emission calculations.
[40 CFR 60.276a(f)]

B.57. The owner or operator shall maintain records of all shop (melt shop and continuous caster buildings) opacity observations made in accordance with 40 CFR 60.273a(d). All shop (melt shop roof and continuous caster building roof) opacity observations in excess of the emission limit specified in 40 CFR 60.272a(a)(3) of 40 CFR 60, Subpart AAa, shall indicate a period of excess emission, and shall be reported to the compliance authority semi-annually, according to 40 CFR 60.7(c).
[40 CFR 60.276a(g)]

B.58. The owner or operator shall maintain the following records for each bag leak detection system required under 40 CFR 60.273a(e):
(1) Records of the bag leak detection system output;
(2) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and,
(3) An identification of the date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, if procedures were initiated within 1 hour of the alarm, the cause of the alarm, an explanation

of the actions taken, the date and time the cause of the alarm was alleviated, and if the alarm was alleviated within 3 hours of the alarm.
[40 CFR 60.276a(h)]

B.59. The owner or operator shall keep records of steel production to demonstrate compliance with the steel production capacities specified in this permit.
[Rule 62-4.070(3), F.A.C.]

C. BRF (Billet Reheat Furnace). Rebar Mill BRF: Emissions Unit No. 009 and Wire/Rod Mill BRF: Emissions Unit No. 011.

Emissions Unit Descriptions: The facility processes steel billets into steel rebar, wire and rod. This is accomplished by reheating the steel billets that are either imported and/or produced by the continuous caster in the Rebar Mill BRF and processing them through various rolling and wire machines in the rolling and wire mills..

EU-009 The new Rebar Mill BRF (EU-009) will be located immediately south and east of the existing furnace and its stack will be located east of the rolling mill building. The production limits are the same as the new EAF/LMF as follows:

- 160 billet tons of steel per hour, maximum daily average;
- 1,192,800 billet tons of steel per consecutive 12-months; and,
- 8,520 hours per year operation.

EU-011 The proposed new Wire/Rod Mill BRF (EU-011) will be located approximately 150 feet southwest of the new Rebar Mill BRF (EU-009) and north of the new Melt Shop building. The production limits of the new Wire/Rod Mill BRF are:

- 160 billet tons of steel per hour, maximum daily average; and,
- 500,000 billet tons of steel per consecutive 12-months.

For the new Wire/Rod Mill BRF, the above production rates may be in addition to the maximum production rates of the EAF/LMF operation due to stored inventory and imported billets delivered to the plant.

Emissions Control: Proper engineering design; firing of natural gas; low-NO_x burners (LNBs); low excess air; good combustion practice, including control of combustion air and temperature, and the firing of natural gas.

Billet: means a semi-finished bar of steel nearly square in section made from the continuous caster operation or imported.

The following specific conditions apply to the emissions unit above.

General.

C.0. Post-Construction.
a. Rebar Mill BRF. The installation of a new Billet Reheat Furnace (BRF), designated now as the "Rebar Mill BRF", was authorized in air construction permit, No. 0310157-007-AC/PSD-FL-349, issued September 21, 2005. The construction shall be in accordance with the application and associated documents provided to the Permitting Authority for the issuance of that Previously issued permit. Any changes to the project that are contrary to those documents and permit shall be reported in writing to the Permitting Authority by the P.E. of Record.
[Rules 62-4.070(3) and 62-4.160(2), F.A.C.; and, 0310157-007-AC/PSD-FL-349]

b. Wire/Rod Mill BRF. This permit authorizes the installation of a Wire/Rod Mill BRF. The construction shall be in accordance with the application and associated documents provided to the Permitting Authority for the issuance of this permit. Any changes to the project that are contrary to those documents and permit shall be reported in writing to the Permitting Authority by the P.E. of Record.
[Rules 62-4.070(3) and 62-4.160(2), F.A.C.; and, 0310157-008-AC/PSD-FL-349A]

Essential Potential to Emit (PTE) Parameters.

C.1. Heat Input While Firing Natural Gas.
a. Rebar Mill BRF and Wire/Rod Mill BRF: The maximum heat input shall not exceed 222.0 x MMBtu per hour.
b. Wire/Rod Mill BRF: The total heat input shall not exceed 792,857 MMBtu per consecutive 12-months (778 MMcu ft per consecutive 12-months @ 1,019 Btu/cu ft).
[Rule 62-212.400(5), F.A.C.; Rule 2.401, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

C.2. Steel processing throughput shall not exceed any of the following:
a. Rebar Mill BRF: 160 billet tons of steel per hour (maximum daily average).
b. Rebar Mill BRF: 1,192,800 billet tons of steel per consecutive 12-months.
[Rule 62-212.400(5), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

c. Wire/Rod Mill BRF: 160 billet tons of steel per hour (maximum daily average).
d. Wire/Rod Mill BRF: 500,000 billet tons of steel per consecutive 12-months.
[Rule 62-212.400(5), F.A.C.; Rule 2.401, JEPB; and, 0310157-008-AC/PSD-FL-349A]

C.3. The hours of operation shall not exceed:
a. Rebar Mill BRF: 8,520 hours per year.
[Rule 62-212.400(5), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

b. Wire/Rod Mill BRF: not restricted.
[Rule 62-212.400(5), F.A.C.; Rule 2.401, JEPB; and, 0310157-008-AC/PSD-FL-349A]

Emission Limitations and Standards

C.4. Best Available Control Technology Determination.

The following table shows the BACT emission limits, control technology, and test methods determined by the Department for the Rebar Mill BRF operations and the Wire/Rod Mill BRF operations:

Pollutant	Emission Limits [1]	Control Technology	Test Methods [2]
PM as PM/PM_{10}	--	Firing natural gas	--
NO_x	0.08 lb/MMBtu	Low-NO_x burners (LNBs); and, good combustion practices and low excess air	EPA Reference Method 7, 7A or 7E; 40 CFR 60, Appendix A
SO_2	--	Firing natural gas	--
CO	0.035 lb/MMBtu	Proper furnace design and good combustion practices, including control of combustion air and temperature	EPA Reference Method 10 40 CFR 60, Appendix A
VOCs	--	Firing natural gas; and, proper furnace design and good combustion practices, including control of combustion air and temperature	--
Visible Emissions	≤10% opacity, except for one 6-min period per hour in which the opacity shall not exceed 20%	Firing natural gas	EPA Reference Method 9 40 CFR 60, Appendix A

[1] The averaging time for each limit shall be in accordance with the test method.
[2] Compliance tests on each BRF operation shall be conducted at a minimum rate of 144 billet tons per hour (BTPH) per Rules 62-297.310(2) & (2)(b), F.A.C. [160 BTPH x 90% = 144 BTPH].
[Rules 62-4.070(3) and 62-212.400(PSD NSR & BACT), F.A.C.; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

C.5. PM/PM_{10}, SO_2 and VOC. Emissions shall be limited by firing natural gas.
[Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

C.6. VE. VE shall not exceed 10 percent opacity, except for one 6-minute period per hour during which the opacity shall not exceed 20 percent.
[Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

C.7. CO. CO emissions shall not exceed:
a. Rebar Mill BRF: 0.035 lb/MMBtu, 7.77 lbs/hr, and 33.02 TPY, based on the average of three (3) test runs conducted in accordance with EPA Reference Method 10 (as described in 40 CFR 60, Appendix A).
[Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

b. Wire/Rod Mill BRF: 0.035 lb/MMBtu, 7.77 lbs/hr, and 13.9 TPY, based on the average of three (3) test runs conducted in accordance with EPA Reference Method 10 (as described in 40 CFR 60, Appendix A).
[Rule 62-210.200(Definitions - BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-008-AC/PSD-FL-349A]

C.8. NO_x. NO_x emissions shall not exceed:
a. Rebar Mill BRF: 0.08 lb/MMBtu, 17.76 lbs/hr, and 75.7 TPY, based on the average of three (3) test runs conducted in accordance with EPA Reference Method 7, 7A or 7E (as described in 40 CFR 60, Appendix A).
[Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

b. Wire/Rod Mill BRF: 0.08 lb/MMBtu, 17.76 lbs/hr, and 31.7 TPY, based on the average of three (3) test runs conducted in accordance with EPA Reference Method 7, 7A or 7E (as described in 40 CFR 60, Appendix A).
[Rule 62-210.200(Definitions - BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-008-AC/PSD-FL-349A]

Excess Emissions

C.9. Excess emissions resulting from startup, shutdown or malfunction of any emissions 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.
[Rule 62-210.700(1), F.A.C.; and, Part III, Rule 2.301, JEPB]

C.10. 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.
[Rule 62-210.700(4), F.A.C.; and, Part III, Rule 2.301, JEPB]

Monitoring of Operations.

C.11. Determination of Process Variables.
(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

Test Methods and Procedures

C.12. VE. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity. Tests shall be conducted initially and annually.
[40 CFR 60.275(e); Rule 62-297.310, F.A.C.; Rule 2.1101, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

C.13. CO. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 10 (as described in 40 CFR 60, Appendix A) for CO. Tests shall be conducted initially and upon renewal.
[40 CFR 60.275(e); Rule 62-297.310, F.A.C.; Rule 2.1101, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

C.14. NO_x. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 7, 7A or 7E (as described in 40 CFR 60, Appendix A) for NO_x. Tests shall be conducted initially and upon renewal.
[40 CFR 60.275(e); Rule 62-297.310, F.A.C.; Rule 2.1101, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

C.15. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

C.16. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted 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, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)(b), F.A.C.; Rule 2.1301, JEPB; and, 0310157-007-AC/PSD-FL-349]

C.17. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

C.18. Applicable Test Procedures.
(a) Required Sampling Time.
1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached as part of this permit.
(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

C.19. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

C.20. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
(a) General Compliance Testing.
2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid fuel for more than 400 hours other than during startup.
3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the permitting authority shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
a. Did not operate; or
b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1– September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
a. Visible emissions, if there is an applicable standard;
b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
9. The owner or operator shall notify the ERMD-EQD and DEP-NED, at least 30 days prior to the initial NSPS performance test and 15 days prior to the date on which each subsequent formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
(b) Special Compliance Tests. When the ERMD-EQD or DEP-NED, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the ERMD-EQD and DEP-NED.
[Rule 62-297.310(7), F.A.C.; Part XI, Rule 2.1101, JEPB; 40 CFR 60.8; and, SIP approved]

Recordkeeping and Reporting Requirements

C.21. Monthly records shall be maintained for the following:
a. Rebar Mill BRF and Wire/Rod Mill BRF: Billet tons of steel processed per month.
b. Rebar Mill BRF: Hours of operation.
c. Wire/Rod Mill BRF: Cubic feet of natural gas fired.
[Rule 62-212.400(5), F.A.C.; Rule 2.401, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

C.22. Records shall be maintained for a minimum of five (5) years and made available to the Department upon request.
[Rule 62-213.440(1)(b), F.A.C.; Rule 2.501, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

Stack Sampling Facilities Provided by the Owner of an Emissions Unit. This section describes the minimum requirements for stack sampling facilities that are necessary to sample point emissions units. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. Emissions units must provide these facilities at their expense. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches.
2. The ports shall be capable of being sealed when not in use.
3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d) Work Platforms.

1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e) Access to Work Platform.

1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.

2. Walkways over free-fall areas shall be equipped with safety rails and toeboards.

(f) Electrical Power.

1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.

2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

(g) Sampling Equipment Support.

1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.

b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.

c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.

2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.

3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

TABLE 297.310-1 CALIBRATION SCHEDULE
(version dated 10/07/96)

[Note: This table is referenced in Rule 62-297.310, F.A.C.]

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually	Spirometer or calibrated wet test or dry gas test meter	2%
	3. Check after each test series	Comparison check	5%

[electronic file name: 297310-1.doc]

Attachment "40 CFR 60, Subpart A"

General Provisions

40 CFR 60.1 Applicability.

(a) Except as provided in 40 CFR 60 subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
(b) Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced
after the date of publication in this part of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
(c) In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution controlagency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air Act (CAA) as amended November 15, 1990 (42 U.S.C. 7661).
[Rule 62-204.800, F.A.C.; and, 40 CFR 60.1(a), (b) and (c)]

40 CFR 60.2 Definitions.

(a) *Administrator* means the Administrator of the Environmental Protection Agency or the Secretary or the Secretary's designee.
[Rule 62-204.800(7)(a), F.A.C.; and, 40 CFR 60.2]

40 CFR 60.7 Notification and recordkeeping.

(a) The owner or operator subject to the provisions of this part shall furnish the Administrator written notification as follows:

(1) A notification of the date construction (or reconstruction as defined under 40 CFR 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.

(2) A notification of the anticipated date of initial startup of an affected facility postmarked not more than 60 days nor less than 30 days prior to such date.

(3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

(5) A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c). Notification shall be postmarked not less than 30 days prior to such date.

(6) A notification of the anticipated date for conducting the opacity observations required by 40 CFR 60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.

(7) A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by 40 CFR 60.8 in lieu of Method 9 observation data as allowed by 40 CFR 60.11(e)(5) of 40 CFR 60. This notification shall be postmarked not less than 30 days prior to the date of the performance test.

(b) The owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

(c) The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form (see 40 CFR 60.7(d) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary
to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(d) The summary report form shall contain the information and be in the format shown in Figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

[See Attached Figure 1-Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance]

(e) The owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.
(f) If notification substantially similar to that in 40 CFR 60.7(a) is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of 40 CFR 60.7(a).
(g) Individual subparts of this part may include specific provisions which clarify or make inapplicable the provisions set forth in this section.
[Rule 62-204.800, F.A.C.; and, 40 CFR 60.7(a), (b), (c), (d), (e), (f) and (g)]

40 CFR 60.8 Performance tests.

(a) Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).
(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in 40 CFR 60.8 shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.
(c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
(e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
(2) Safe sampling platform(s).
(3) Safe access to sampling platform(s).
(4) Utilities for sampling and testing equipment.

(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.
[Rule 62-204.800, F.A.C.; and, 40 CFR 60.8(a), (b)(1), (4) & (5), (c), (e) and (f)]

40 CFR 60.10 State authority.

The provisions of 40 CFR 60 shall not be construed in any manner to preclude any State or political subdivision thereof from:
(a) Adopting and enforcing any emission standard or limitation applicable to an affected facility, provided that such emission standard or limitation is not less stringent than the standard applicable to such facility.
(b) Requiring the owner or operator of an affected facility to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of such facility.
[Rule 62-204.800, F.A.C.; and, 40 CFR 60.10(a) and (b)].

40 CFR 60.11 Compliance with standards and maintenance requirements.

(a) Compliance with standards in this part, other than opacity standards, shall be determined by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.
(b) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
(c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
(d) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(e)(1) For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in 40 CFR 60.8 unless one of the following conditions apply. If no performance test under 40 CFR 60.8 is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test required under 40 CFR 60.8, the source owner or operator shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. In these cases, the 30-day prior notification to the Administrator required in 40 CFR 60.7(a)(6) shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under 40 CFR 60.8. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Reference Method 9 of appendix B of this part. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in 40 CFR 60.11(e)(5), the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the source shall meet the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in appendix B of 40 CFR 60, has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.

(2) Except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.
(3) The owner or operator of an affected facility to which an opacity standard in this part applies may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The owner or operator of the affected facility shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in 40 CFR 60.7(a)(6). If, for some reason, the Administrator cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of 40 CFR 60.7(e)(1) shall apply.
(4) The owner or operator of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test required by 40 CFR 60.8 and shall furnish the Administrator a written report of the monitoring results along with Method 9 and 40 CFR 60.8 performance test results.
(5) The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine opacity compliance.
(6) Upon receipt from an owner or operator of the written reports of the results of the performance tests required by 40 CFR 60.8, the opacity observation results and observer certification required by 40 CFR 60.11(e)(1), and the COMS results, if applicable, the Administrator will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to comply with an opacity standard, only those results are required to be submitted along with the performance test results required by 40 CFR 60.8. If the Administrator finds that an affected facility is in compliance with all applicable standards for which performance tests are conducted in accordance with 40 CFR 60.8 of this part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, the shall notify the owner or operator and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility.
(7) The Administrator will grant such a petition upon a demonstration by the owner or operator that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard.

(8) The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity standard in the Federal Register.

(f) Special provisions set forth under an applicable subpart of 40 CFR 60 shall supersede any conflicting provisions of 40 CFR 60.11.

(g) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[Rule 62-204.800, F.A.C.; and, 40 CFR 60.11(a), (b), (c), (d), (e), (f) and (g)]

40 CFR 60.12 Circumvention.

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[Rule 62-204.800, F.A.C.; and, 40 CFR 60.12]

40 CFR 60.13 Monitoring requirements.

(a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

(b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under 40 CFR 60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.

(c) If the owner or operator of an affected facility elects to submit continuos opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he/she shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 40 CFR 60.8 and as described in 40 CFR 60.11(e)(5), shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 40 CFR 60.8 is conducted.

(2) Except as provided in 40 CFR 60.13(c)(1), the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

(d)(1) Owners and operators of all continuous emission monitoring systems installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

(e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(f) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of 40 CFR 60 shall be used.

(g) When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

(h) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorder during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

(i) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of this part including, but not limited to the following:

(1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by this part would not provide accurate measurements due to liquid water or other interferences caused by substances with the effluent gases.

(2) Alternative monitoring requirements when the affected facility is infrequently operated.

(3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.

(4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

(5) Alternative methods of converting pollutant concentration measurements to units of the standards.

(6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.

(7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any subpart.

(8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Administrator may require that such demonstration be performed for each affected facility.

(9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities are released to the atmosphere through more than one point.

(j) An alternative to the relative accuracy test specified in Performance Specification 2 of appendix B may be requested as follows:

(1) An alternative to the reference method tests for determining relative accuracy is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Administrator to waive the relative accuracy test in section 7 of Performance Specification 2 and substitute the procedures in section 10 if the results of a performance test conducted according to the requirements in 40 CFR 60.8 of this subpart or other tests performed following the criteria in 40 CFR 60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Administrator to waive the relative accuracy test and substitute the procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the relative accuracy test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Administrator will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).

(2) The waiver of a CEMS relative accuracy test will be reviewed and may be rescinded at such time following successful completion of the alternative RA procedure that the CEMS data indicate the source emissions approaching the level of the applicable standard. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70 percent of the applicable standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., 40 CFR 60.45(g)(2) and 40 CFR 60.45(g)(3), 40 CFR 60.73(e), and 40 CFR 60.84(e)]. It is the

responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of relative accuracy testing. If this criterion is exceeded, the owner or operator must notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Administrator will review the notification and may rescind the waiver and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2.

[Rule 62-204.800, F.A.C.; and, 40 CFR 60.13(a) thru (j)].

40 CFR 60.14 Modification.

(a) Except as provided under 40 CFR 60.14(e) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

(b) Emission rate shall be expressed as kg/hr (lbs/hour) of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:

(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors", EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in 40 CFR 60.14(b)(1) . When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60 appendix C of 40 CFR 60 shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

(c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.

(d) [Reserved]

(e) The following shall not, by themselves, be considered modifications under this part:

(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.

(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.

(3) An increase in the hours of operation.

(4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.

(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.

(6) The relocation or change in ownership of an existing facility.

(f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.

(g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved.

[Rule 62-204.800, F.A.C.; and, 40 CFR 60.14(a) thru (g)].

40 CFR 60.15 Reconstruction.

(a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.

(b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and

(2) It is technologically and economically feasible to meet the applicable standards set forth in this part.

(c) "Fixed capital cost"' means the capital needed to provide all the depreciable components.

(d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:

(1) Name and address of the owner or operator.

(2) The location of the existing facility.

(3) A brief description of the existing facility and the components which are to be replaced.

(4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.

(5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.

(6) The estimated life of the existing facility after the replacements.

(7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

(e) The Administrator will determine, within 30 days of the receipt of the notice required by 40 CFR 60.15(d) and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.

(f) The Administrator's determination under 40 CFR 60.15(e) shall be based on:

(1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;

(2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;

(3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and

(4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.

(g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.

[Rule 62-204.800, F.A.C.; and, 40 CFR 60.15(a) thru (g)].

Figure 1. Summary Report
Gaseous and Opacity Excess Emission and Monitoring System Performance

Company: _____

Address: _____

Process Unit(s) Description: _____

Emission Limitation: _____

Pollutant *(Circle One)*: SO_2 NO_X TRS H_2S CO Opacity

Reporting Period Dates: From _____ to _____

Total source operating time in reporting period [1]: _____

Monitor Manufacturer: _____

Monitor Model No.: _____

Date of Latest CMS Certification or Audit: _____

Emission Data Summary [1]		**CMS Performance Summary** [1]	
1. Duration of excess emissions in reporting period due to:		1. CMS downtime in reporting period due to:	
a. Startup/shutdown	____	a. Monitor equipment malfunctions	____
b. Control equipment problems	____	b. Non-Monitor equipment malfunctions	____
c. Process problems	____	c. Quality assurance calibration	____
d. Other known causes	____	d. Other known causes	____
e. Unknown causes	____	e. Unknown causes	____
2. Total duration of excess emissions	____	2. Total CMS Downtime	____
3. [Total duration of excess emissions] x (100%) / [Total source operating time]	____ % [2]	3. [Total CMS Downtime] x (100%) / [Total source operating time]	____ % [2]

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted.

On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____

Title: _____

Date: _____

GERDAU AMERISTEEL

Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Bruce Mitchell

RE: Affidavit of Publication for Air construct permit for Gerdau Ameristeel: 0310157-009-AC - DRAFT/PSD-FL-349B

Please find attached the Affidavit of Publication.

Sincerely

James P. Wold
Environmental Manager

BEST AVAILABLE COPY

THE FLORIDA TIMES-UNION
Jacksonville, FL
Affidavit of Publication

Florida Times-Union

GERDAU AMERISTEEL
JACKSONVILLE STEEL MILL DIVISION
P O BOX 518/ 16770 REBAR RD.
BALDWIN, FL. 32234

ATTN: JAMES WOLD

REFERENCE: 0118127
AD # 11231698

State of Florida
County of Duval

Before the undersigned authority personally appeared Sharon Walker who on oath says she is a Legal Advertising Representative of The Florida Times-Union, a daily newspaper published in Jacksonville in Duval County, Florida; that the attached copy of advertisement is a legal ad published in The Florida Times-Union. Affiant further says that The Florida Times-Union is a newspaper published in Jacksonville, in Duval County, Florida, and that the newspaper has heretofore been continuously published in Duval County, Florida each day, has been entered as second class mail matter at the post office in Jacksonville, in Duval County, Florida for a period of one year proceeding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission, or refund for the purpose of securing this advertisement for publication in said newspaper.

PUBLISHED ON: 03/15/2007

FILED ON: 03/15

Name: Sharon Walker Title: Legal Advertising Represer
In testimony whereof, I have hereunto set my hand and affi
Seal, the day and year aforesaid.

NOTARY: Joan Miller

JOAN MILLER
MY COMMISSION # DD 357238
EXPIRES: January 23, 2009
Bonded Thru Budget Notary Services

PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT

Permitting Authority
Department of Environmental Protection
Bureau of Air Regulation

Draft Air Construction Permit Project No. 0310157-009-AC
PSD Project No. PSD-FL-349B

Authorization to Use Tires in the New Electric Arc Furnace for Steel Making

Gerdau Ameristeel
Jacksonville Steel Mill

Duval County

Applicant: The applicant for this project is Gerdau Ameristeel, which operates the Jacksonville Steel Mill located c 16770 Rebar Road, Baldwin, Duval County. The applicant's authorized representative and mailing address are: M Donald R. Shumake, Vice President and General Manager, Gerdau Ameristeel, 16770 Rebar Road, Baldwin, Floric 32234.

Facility Location The applicant operates the existing Jacksonville Steel Mill, which is an iron and steel scrap recy cling (secondary metal production) facility located near Baldwin in Duval County, Florida.

Project On January 5, 2007, the applicant applied to the permitting authority for an air construction permit to us tires (shredded or whole) as a carbon source for steel making in the new electric arc furnace (EAF), which is cu rently under construction (0310157-007-AC/PSD-FL-349). The new EAF is currently being built as part of a moderr ization project and Best Available Control Technology (BACT) determinations were made for emissions of particu *late matter (PM/PM10), nitrogen oxides (NOx), sulfur dioxide (SO2), carbon monoxide (CO) and volatile organi* compounds (VOC). Tires will substitute for petroleum coke. The use of tires as a carbon source in steel productic has been proven within the industry. The carbon source represents only 1 % ofthe total charge to the EAF. There fore, the Department will authorize the use of tires in the steel making process. After completion of constructior the draft permit requires separate performance tests while using petroleum coke (no tires) and while using tire (shredded or whole).

Permitting Authority Applications for air construction permits are subject to review in accordance with the provi sions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Cod (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required t perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is th Permitting Authority responsible for making a permit determination for this project. The Permitting Authority' physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, and the mailing address is 26C Blair Stone Road, MS #5505, Tallahassee, Florida 323992400. The Permitting Authority's phone number i 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Autho ity. The complete project file includes the Technical Evaluation and Preliminary Determination, the Draft permi the application, and the information submitted by the applicant, exclusive of confidential records under Sectic 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additionc information at the address and phone number listed above.

Notice of Intent to Issue Perm it : The Permitting Authority gives notice of its intent to issue an air construction permit to the applicant for the project described above. The applicant has provided reasonabi assurance that operation of proposed equipment will not adversely impact air quality and that the project wi comply with all applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The permittir authority will issue the Final permit, in accordance with the conditions of the attached Draft permit, unless a timel petition for an administrative hearing is filed under Sections 10.569 and 120.57, F.S., or unless public commer received in accordance with this notice results in a different decision or a significant change of terms or conditions

CommentsThe Department will accept written comments concerning the proposed draft permit for a period o fourteen (14) days from the date of publication of the Public Notice. Written comments regarding the draft perm should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #550: Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If writte comments received result in a significant change in the proposed agency action, the Department shall revise th draft permit and require, if applicable, another Public Notice.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for c administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain th information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office c General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #3. *Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be file* within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permits. Petitians filed by an persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen (1- days of publication of the attached Public Notice or within fourteen (14) days of receipt of this Written Notic ofIntent to Issue Air Permits, whichever occurs first. Under Section 120.60(3), F.S., however, any person who aske the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of thc notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at th address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate tim period shall constitute a waiver of that person's right to request an administrative determination (hearing) unde Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subseque intervention will be only at the approval of the presiding officer upon the filing ofa motion in compliance with Ru 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain th following information: (a) The name and address of each agency affected and each agency's file or identificatic number, if known; (b) The name, address, and telephone number of the petitioner; the name, address ar telephone number of the petitioner's representative, if any, which shall be the address for service purposes durir the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by th agency determination; (c) A statement of how and when each petitianer received notice of the agency actian c proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must s state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contenc warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statut the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respe to the agency's proposed action. A petition that does not dispute the material facts upon which the Permittir Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the sam information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petitic means that the Permitting Authority's final action may be different from the position taken by it in this Writte Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decisic of the Permitting Authority on the application have the right to petition to become a party to the proceeding, accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

GERDAU AMERISTEEL

RECEIVED
MAR 29 2007
BUREAU OF AIR REGULATION

Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Bruce Mitchell

RE: Affidavit of Publication for Air construct permit for Gerdau Ameristeel: 0310157-009-AC - DRAFT/PSD-FL-349B

Please find attached the Affidavit of Publication.

Sincerely

James P. Wold
Environmental Manager

THE FLORIDA TIMES-UNION
Jacksonville, FL
Affidavit of Publication

Florida Times-Union

GERDAU AMERISTEEL
JACKSONVILLE STEEL MILL DIVISION
P O BOX 518/ 16770 REBAR RD.
BALDWIN, FL. 32234

ATTN: JAMES WOLD

REFERENCE: 0118127
AD # 11231698

State of Florida
County of Duval

Before the undersigned authority personally appeared Sharon Walker who on oath says she is a Legal Advertising Representative of The Florida Times-Union, a daily newspaper published in Jacksonville in Duval County, Florida; that the attached copy of advertisement is a legal ad published in The Florida Times-Union. Affiant further says that The Florida Times-Union is a newspaper published in Jacksonville, in Duval County, Florida, and that the newspaper has heretofore been continuously published in Duval County, Florida each day, has been entered as second class mail matter at the post office in Jacksonville, in Duval County, Florida for a period of one year proceeding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission, or refund for the purpose of securing this advertisement for publication in said newspaper.

PUBLISHED ON: 03/15/2007

FILED ON: 03/15

Name: Sharon Walker Title: Legal Advertising Represer
In testimony whereof, I have hereunto set my hand and affi
Seal, the day and year aforesaid.

NOTARY: Joan Miller

JOAN MILLER
MY COMMISSION # DD 357238
EXPIRES: January 23, 2009
Bonded Thru Budget Notary Services

PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT

Permitting Authority
Department of Environmental Protection
Bureau of Air Regulation

Draft Air Construction Permit Project No. 0310157-009-AC
PSD Project No. PSD-FL-349B

Authorization to Use Tires in the New Electric Arc Furnace for Steel Making

Gerdau Ameristeel
Jacksonville Steel Mill

Duval County

Applicant: The applicant for this project is Gerdau Ameristeel, which operates the Jacksonville Steel Mill located at 16770 Rebar Road, Baldwin, Duval County. The applicant's authorized representative and mailing address are: Mr. Donald R. Shumake, Vice President and General Manager, Gerdau Ameristeel, 16770 Rebar Road, Baldwin, Florida 32234.

Facility Location: The applicant operates the existing Jacksonville Steel Mill, which is an iron and steel scrap recycling (secondary metal production) facility located near Baldwin in Duval County, Florida.

Project: On January 5, 2007, the applicant applied to the permitting authority for an air construction permit to use tires (shredded or whole) as a carbon source for steel making in the new electric arc furnace (EAF), which is currently under construction (0310157-007-AC/PSD-FL-349). The new EAF is currently being built as part of a modernization project and Best Available Control Technology (BACT) determinations were made for emissions of particulate matter (PM/PM10), nitrogen oxides (N0x), sulfur dioxide (S02), carbon monoxide (CO) and volatile organic compounds (VOC). Tires will substitute for petroleum coke. The use of tires as a carbon source in steel production has been proven within the industry. The carbon source represents only 1 % ofthe total charge to the EAF. Therefore, the Department will authorize the use of tires in the steel making process. After completion of construction, the draft permit requires separate performance tests while using petroleum coke (no tires) and while using tires (shredded or whole).

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 323992400. The Permitting Authority's phone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Technical Evaluation and Preliminary Determination, the Draft permit, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above.

Notice of Intent to Issue Perm it : The Permitting Authority gives notice of its intent to issue an air construction permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The permitting authority will issue the Final permit, in accordance with the conditions of the attached Draft permit, unless a timely petition for an administrative hearing is filed under Sections 10.569 and 120.57, F.S., or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

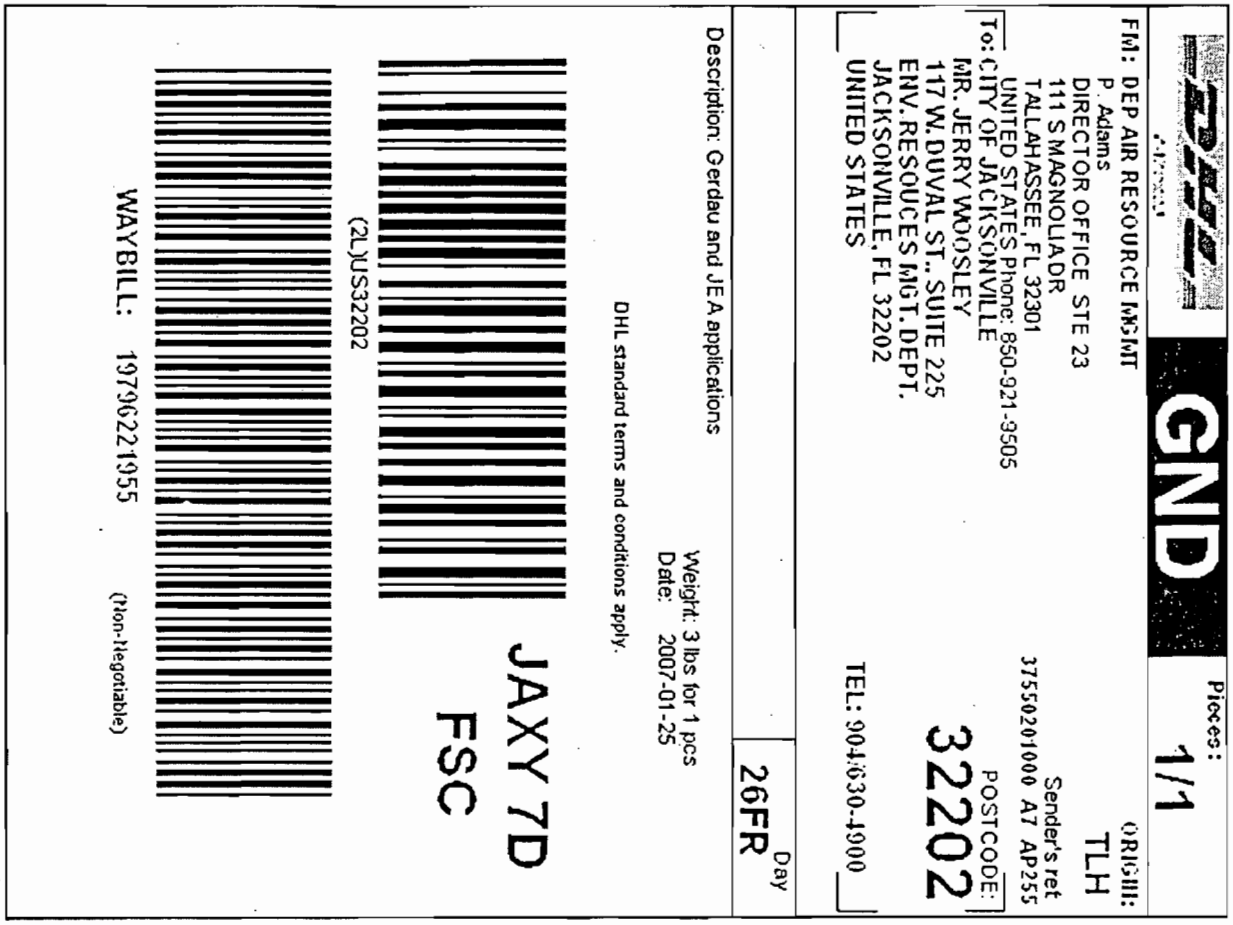
Comments: The Department will accept written comments concerning the proposed draft permit for a period of fourteen (14) days from the date of publication of the Public Notice. Written comments regarding the draft permit should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the draft permit and require, if applicable, another Public Notice.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permits. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen (14) days of publication of the attached Public Notice or within fourteen (14) days of receipt of this Written Notice ofIntent to Issue Air Permits, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing ofa motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.



▲ PEEL HERE PEEL HERE ▲

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DO NOT PHOTOCOPY

Using a photocopy could delay the delivery of your package and will result in additional shipping charge

SENDER'S RECEIPT
Waybill #: 19796221955

To(Company):
City of Jacksonville
Env. Resouces Mgt. Dept.
117 W. Duval St., Suite 225

Jacksonville, FL 32202
UNITED STATES

Attention To: Mr. Jerry Woosley
Phone#: 904/630-4900

Sent By: P. Adams
Phone#: 850-921-9505

Rate Estimate: 3.07
Protection: ~~Not Required~~
Description: Gerdau and JEA applications

Weight (lbs.): 3
Dimensions: 0 x 0 x 0

Ship Ref: 37550201000 A7 AP255
Service Level: Ground (Est. delivery in 1 business day(s))

Special Svc:

Date Printed: 1/25/2007
Bill Shipment To: Sender
Bill To Acct: 778941286

DHL Signature (optional) _____ Route _____ Date _____ Time _____

For Tracking, please go to www.dhl-usa.com or call 1-800-225-5345

Thank you for shipping with DHL

Create new shipment ▶ View pending shipments Print waybill

DHL EXPRESS

Adams, Patty

From: Harvey, Mary

Sent: Tuesday, March 06, 2007 1:52 PM

To: 'shumake@gerdauameristeel.com'; 'smccann@golder.com'; 'ROBINSON@coj.net'; 'jwold@gerdauameristeel.co'; 'DLaRocca@golder.com'

Cc: Mitchell, Bruce; Adams, Patty; Gibson, Victoria

Subject: Air construct permit for Gerdau Ameristeel: 0310157-009-AC - DRAFT/PSD-FL-349B

Attachments: 0310157.009.AC.D_pdf.zip

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation

Adams, Patty

From: Harvey, Mary
Sent: Tuesday, March 06, 2007 1:59 PM
To: 'worley.gregg@epa.gov'
Cc: Mitchell, Bruce; Adams, Patty
Subject: FW: Air construct permit for Gerdau Ameristeel: 0310157-009-AC - DRAFT/PSD-FL-349B
Attachments: 0310157 009 AC - DRAFT -Figure 1 Summary of Gaseous and Opacity Excess Emissions and Monitoring Systems Performance Report.PDF; 0310157- 009 AC - DRAFT - EAF Tire Usage.PDF; 0310157-009-AC - DRAFT - TEPD - Gerdau Tires.PDF; 0310157-009-AC - Draft Permit - Gerdau Tires.PDF; Appendix SS-1 Stack Sampling Facilities - fACILITY #0310157-009-AC-DRAFT.PDF; Attachment 40 CFR 60 Subpart A - fACILITY #0301057-009-AC-DRAFT.PDF; SIGNED DOCUMENT - FOR FACILITY #0310157-009-AC-DRAFT.pdf; Table 297 310-1 - FACILITY #0310157-009-AC-DRAFT.PDF

From: Harvey, Mary
Sent: Tuesday, March 06, 2007 1:52 PM
To: 'shumake@gerdauameristeel.com'; 'smccann@golder.com'; 'ROBINSON@coj.net'; 'jwold@gerdauameristeel.co'; 'DLaRocca@golder.com'
Cc: Mitchell, Bruce; Adams, Patty; Gibson, Victoria
Subject: Air construct permit for Gerdau Ameristeel: 0310157-009-AC - DRAFT/PSD-FL-349B

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation

Adams, Patty

From: Harvey, Mary
Sent: Tuesday, March 06, 2007 1:59 PM
To: Adams, Patty
Subject: FW: Air construct permit for Gerdau Ameristeel: 0310157-009-AC - DRAFT/PSD-FL-349B

From: Larocca, David [mailto:DLaRocca@golder.com]
Sent: Tuesday, March 06, 2007 1:57 PM
To: Harvey, Mary
Subject: RE: Air construct permit for Gerdau Ameristeel: 0310157-009-AC - DRAFT/PSD-FL-349B

thank you

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]
Sent: Tuesday, March 06, 2007 1:52 PM
To: shumake@gerdauameristeel.com; McCann, Scott; ROBINSON@coj.net; jwold@gerdauameristeel.co; Larocca, David
Cc: Mitchell, Bruce; Adams, Patty; Gibson, Victoria
Subject: Air construct permit for Gerdau Ameristeel: 0310157-009-AC - DRAFT/PSD-FL-349B

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

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The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation

INTEROFFICE MEMORANDUM

TO:	Trina Vielhauer
THRU:	Jeff Koerner
FROM:	Bruce Mitchell
DATE:	March 1, 2007
SUBJ:	Gerdau Ameristeel Jacksonville Steel Mill Air Construction Permit Permit Project No.: 0310157-009-AC/PSD-FL-349B Authorization to Use Tires as a Carbon Source for Steel Making in a New EAF (EU-008)

Attached is the Draft Air Construction Permit for the Gerdau Ameristeel's existing Jacksonville Steel Mill, located at 16770 Rebar Road, Jacksonville, Duval County, Florida. The Draft Air Construction Permit is being issued to authorize the use of tires as a carbon source in a new EAF (EU-008), which is under construction (0310157-007-AC/PSD-FL-349). The present carbon source is petroleum coke. The carbon and hydrogen in the tires will provide fuel energy while the steel belts and beads will become part of the heat (steel product). This draft permit is a revision of the original air construction permit. Deleted text is represented by strikethrough. New text is represented by a double underline. The only changes made are to the placard page (Page 1), Specific Condition B.4, and Specific Condition B.32.

Attachments

TLV/jk/bm

Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

March 5, 2007

Electronically Sent – Received Receipt Requested

Mr. Donald R. Shumake
Vice President and General Manager
Gerdau Ameristeel
Jacksonville Steel Mill
16770 Rebar Road
Baldwin, Florida 32234

Re: Authorization to Use Tires as a Carbon Source for Steel Making in a New Electric Arc Furnace
Project No. 0310157-009-AC/PSD-FL-349B

Dear Mr. Shumake:

Attached is one copy of the proposed authorization to use tires (shredded or whole) as a carbon source for steel making in the new electric arc furnace (EU-008), which is currently under construction (0310157-007-AC/PSD-FL-349) and located at Gerdau Ameristeel's existing facility, 16770 Rebar Road, Baldwin, Duval County. This draft permit is a revision of the original air construction permit. Deleted text is represented by strikethrough. New text is represented by a double underline. The only changes made are to the placard page (Page 1), Specific Condition B.4, and Specific Condition B.32.

The permitting authority's "INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT" and the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT" are also included. The "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT" must be published as soon as possible. Proof of publication, i.e., newspaper affidavit, must be provided to the permitting authority's office within 7 (seven) days of publication pursuant to Rule 62-110.106(5), Florida Administrative Code (F.A.C.). Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to Jeffery F. Koerner, P.E., at the above letterhead address. If you have any other questions, please contact Bruce Mitchell at 850/413-9198.

Sincerely,

Jeffery J. Koerner

FOR Trina L. Vielhauer, Chief
Bureau of Air Regulation

TLV/jk/bm

Enclosures

Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Jeffery J. Koerner

FOR Trina L. Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this "Written Notice of Intent to Issue Air Permit" package (including the Public Notice and the Draft permit) was sent electronically (with Received Receipt Requested) before the close of business on 3/6/07 to the persons listed below.

Mr. Donald R. Shumake, Gerdau Ameristeel (shumake@gerdauameristeel.com)
Mr. Scott A. McCann, Golder Associates, Inc. (smccann@golder.com)
Mr. Richard Robinson, ERMD-EQD (ROBINSON@coj.net)
Mr. James P. Wold, Gerdau Ameristeel (jwold@gerdauameristeel.com)
Mr. David LaRocca, Golder Associates, Inc. (DLaRocca@golder.com)
Mr. Gregg Worley, USEPA Region 4 (worley.gregg@epa.gov)

Clerk Stamp

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.

Mary L. Harvey 3/6/07
(Clerk) (Date)

INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT

In the Matter of an
Application for Permit by:

Gerdau Ameristeel
16770 Rebar Road
Baldwin, Florida 32234

Authorized Representative:
Mr. Donald R. Shumake, V.P. and General Manager

Draft Permit Project No. 0310157-009-AC
PSD Project No. PSD-FL-349B
Jacksonville Steel Mill
Tires as a Carbon Source
Duval County

WRITTEN NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT

Facility Location: The applicant, Gerdau Ameristeel, operates the Jacksonville Steel Mill, which is an existing scrap iron and steel recycling (secondary metal production) facility located at 16770 Rebar Road, Baldwin, Duval County.

Project: On January 5, 2007, the applicant applied to the permitting authority for an air construction permit to use tires (shredded or whole) as a carbon source for steel making in the new electric arc furnace (EAF), which is currently under construction (0310157-007-AC/PSD-FL-349). The new EAF is currently being built as part of a modernization project and Best Available Control Technology (BACT) determinations were made for emissions of particulate matter (PM/PM_{10}), nitrogen oxides (NO_x), sulfur dioxide (SO_2), carbon monoxide (CO) and volatile organic compounds (VOC). Tires will substitute for petroleum coke. The use of tires as a carbon source in steel production has been proven within the industry. The carbon source represents only 1% of the total charge to the EAF. Therefore, the Department will authorize the use of tires in the steel making process. After completion of construction, the draft permit requires separate performance tests while using petroleum coke (no tires) and while using tires (shredded or whole). The only changes made are to the placard page (Page 1), Specific Condition B.4., and Specific Condition B.32.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's phone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Technical Evaluation and Preliminary Determination, the Draft AC, the request/application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above.

Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue an air construction permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The permitting

authority will issue the final permit, in accordance with the conditions of the attached draft permit, unless a timely petition for an administrative hearing is filed under Sections 10.569 and 120.57, F.S., or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Department will accept written comments concerning the proposed draft permit for a period of fourteen (14) days from the date of publication of the Public Notice. Written comments regarding the draft permit should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the draft permit and require, if applicable, another Public Notice.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen (14) days of publication of the attached Public Notice or within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the

PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT

Permitting Authority
Department of Environmental Protection
Bureau of Air Regulation

Draft Air Construction Permit Project No. 0310157-009-AC
PSD Project No. PSD-FL-349B

Authorization to Use Tires in the New Electric Arc Furnace for Steel Making

Gerdau Ameristeel
Jacksonville Steel Mill

Duval County

Applicant: The applicant for this project is Gerdau Ameristeel, which operates the Jacksonville Steel Mill located at 16770 Rebar Road, Baldwin, Duval County. The applicant's authorized representative and mailing address are: Mr. Donald R. Shumake, Vice President and General Manager, Gerdau Ameristeel, 16770 Rebar Road, Baldwin, Florida 32234.

Facility Location: The applicant operates the existing Jacksonville Steel Mill, which is an iron and steel scrap recycling (secondary metal production) facility located near Baldwin in Duval County, Florida.

Project: On January 5, 2007, the applicant applied to the permitting authority for an air construction permit to use tires (shredded or whole) as a carbon source for steel making in the new electric arc furnace (EAF), which is currently under construction (0310157-007-AC/PSD-FL-349). The new EAF is currently being built as part of a modernization project and Best Available Control Technology (BACT) determinations were made for emissions of particulate matter (PM/PM_{10}), nitrogen oxides (NO_x), sulfur dioxide (SO_2), carbon monoxide (CO) and volatile organic compounds (VOC). Tires will substitute for petroleum coke. The use of tires as a carbon source in steel production has been proven within the industry. The carbon source represents only 1% of the total charge to the EAF. Therefore, the Department will authorize the use of tires in the steel making process. After completion of construction, the draft permit requires separate performance tests while using petroleum coke (no tires) and while using tires (shredded or whole).

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's phone number is 850/488-0114.

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Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue an air construction permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The permitting authority will issue the Final permit, in accordance with the conditions of the attached Draft permit, unless a timely petition for an administrative hearing is filed under Sections 10.569 and 120.57, F.S., or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Department will accept written comments concerning the proposed draft permit for a period of fourteen (14) days from the date of publication of the Public Notice. Written comments regarding the draft permit should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the draft permit and require, if applicable, another Public Notice.

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A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

Applicant

Gerdau Ameristeel - Jacksonville Steel Mill
16770 Rebar Road
Baldwin, Florida 32234

Facility ID No. 0310157

County

Duval County, Florida

Project

Air Construction Permit Project No. 0310157-009-AC
PSD Permit Project No. PSD-FL-349B
{Revises PSD Permit PSD-FL-349A}

PSD Permit Modification
New Electric Arc Furnace (EU-008)
Tires as a Carbon Source in Steel Production

Permitting Authority

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation – Air Permitting North
2600 Blair Stone Road, Mail Station #5505
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114
Fax: 850/921-9533

March 5, 2007

1. APPLICATION INFORMATION

Facility Location

Gerdau Ameristeel's Jacksonville Steel Mill is located at 16770 Rebar Road, Duval County, Florida. The UTM coordinates of this facility are: Zone 17; 405.7 km East; 3350.2 km North (Latitude is 30° 16' 52" North / Longitude is 81° 58' 50'').

Facility Regulatory Classification

The facility belongs to Major Group No. 33 (Primary Metal Industries), Group No. 339 (Miscellaneous Primary Metal Products), and Industry No. 3390 (Steel Mills). The North American Industry Classification System (NAICS) Code is No. 331111, for Steel Manufacturing Facilities that Operate Electric Arc Furnaces. The facility is regulated according to the following categories.

Title III: The existing facility is not a major source of hazardous air pollutants (HAP).

Title IV: The existing facility operates no units subject to the acid rain provisions of the Clean Air Act.

Title V: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

PSD: The existing facility is a PSD-major facility in accordance with Rules 62-210.200 (Definitions) and 62-212.400 (PSD), F.A.C. This facility belongs to one of the 28 Major Facility Categories (Secondary Metal Production Plants) listed in the definition of a major stationary source.

NSPS: The electric arc furnace operation (melt shop, EAF and LMF) is subject to the New Source Performance Standards in Subpart AAa of 40 CFR 60, which are adopted and incorporated by reference in Rule 62-204.800, F.A.C.

NESHAP: The facility is not major for emissions of hazardous air pollutants; therefore, Subpart EEEEE (Iron and Steel Foundries) in 40 CFR Part 63 does not apply.

General Facility and Process Description

Gerdau Ameristeel operates the existing Jacksonville Steel Mill near Baldwin in Duval County, Florida. The facility is a scrap iron and steel recycling (secondary metal production) plant that has been operating since 1975. The plant receives scrap iron and steel by truck and rail and processes it into steel rebar, wire and rod. The steel is produced in a series of batch processes including charging, melting, refining, slagging, tapping, further refining, and casting. Main components of the plant include: an electric arc furnace (EAF); a ladle metallurgy furnace (LMF); a scrap handling building adjacent to the existing EAF shop; a continuous caster; a billet reheat furnace (BRF); a rolling mill; a rod mill; and, slag handling and storage.

On September 21, 2005, the Department issued Permit No. 0310157-007-AC (PSD-FL-349) to modernize the plant by constructing a new melt shop, a new EAF, a new LMF, and a new BRF. On May 5, 2006, the Department issued Permit No. 0310157-008-AC (PSD-FL-349A) to modify the PSD permit by authorizing construction of a second new gas-fired BRF to allow for the simultaneous processing of steel billets. The originally permitted BRF will be dedicated to producing rebar and the second BRF will be dedicated to producing wire or rod. Once completed, the modernized plant will have a permitted steel production capacity of 1,192,000 tons per consecutive 12-months of tapped liquid steel.

Project Description

Steel production begins by adding a "charge" of iron and steel scrap to the top of the electric arc furnace (EAF). Other materials, such as lime and carbon (petroleum coke) may also be charged. The EAF consists of a furnace shell, furnace roof and the transformer. The EAF melts the charge by heating with electric arcs from carbon electrodes and secondarily with gas-fired sidewall burners inside the furnace. Molten steel is then tapped (poured) from the EAF into a ladle metallurgical furnace (LMF). A "heat cycle", sometimes referred to as a

"heat", is the period of time beginning when scrap is charged to an empty EAF and ending when the EAF tap is completed.

On January 5, 2007, the applicant requested authorization to use shredded or whole tires as a carbon source in the new EAF (EU-008) as an alternative to petroleum coke. These materials represent approximately 1% of the total charge. The tires will be unloaded by truck to a temporary storage location. The tires will be loaded by a bobcat into a flux bin and then loaded into the charge bucket for use in the EAF. The tires will supplement and/or replace the petroleum coke as the carbon source. The use of tires as a carbon source in steel production has been proven within the industry.

The carbon in the tires and the steel belts and beads will become part of the steel produced. Tires typically have an approximate sulfur content of 1.4% by weight and a heating value of 15,800 Btu/lb compared to petroleum coke with an approximate sulfur content of 3% by weight (or higher) and a heating value of 13,200 Btu/lb. The applicant maintains that the use of tires versus petroleum coke will result in decreased emissions of sulfur dioxide (SO_2) and no emission increases of carbon monoxide (CO), nitrogen oxides (NO_x), particulate matter (PM/PM_{10}), or volatile organic compounds (VOC). The applicant maintains that the EAF will comply with all permit emissions standards and conditions when using tires as a source of carbon.

2. PROJECT REVIEW

Federal Requirements

The electric arc furnace operation (melt shop, EAF and LMF) is subject to the New Source Performance Standards in Subpart AAa of 40 CFR 60, which are adopted and incorporated by reference in Rule 62-204.800, F.A.C. Based on the application received for this project, the facility is not major for emissions of hazardous air pollutants. Therefore, NESHAP Subpart EEEEE (Iron and Steel Foundries) in 40 CFR Part 63 does not apply.

State Regulations

The proposed project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). This project is subject to the applicable rules and regulations defined in the following Chapters of the Florida Administrative Code (F.A.C.): Chapters 62-4 (Permitting Requirements), 62-204 (Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference), 62-210 (Definitions, Required Permits, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms), 62-212 (Preconstruction Review, PSD Requirements, and BACT Determinations), 62-296 (Emission Limiting Standards), and 62-297 (Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures). In addition, operation of the proposed equipment is subject to the requirements of Chapter 62-213, F.A.C. (Operation Permits for Major Sources of Air Pollution).

PSD Applicability Review

The Department regulates major air pollution sources in accordance with Florida's Prevention of Significant Deterioration (PSD) of Air Quality program, as defined in Rule 62-212.400, F.A.C. A PSD preconstruction review is only required in areas that are currently in attainment with the National Ambient Air Quality Standard (AAQS) for a given pollutant or areas designated as "unclassifiable" such pollutants. A PSD-major facility is one that emits or has the potential to emit: 250 tons per year or more of any regulated air pollutant; or 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the 28 PSD Major Facility Categories; or 5 tons per year of lead.

This existing facility is located in Duval County, which is classified as being in attainment with the ambient air quality standards for the pollutants CO and NO_2, unclassifiable for the pollutants SO_2 and PM with an

aerodynamic diameter of ten microns or less (PM_{10}), and a maintenance area for the pollutant ozone (which is regulated by the control of VOC). There is also a maintenance area for PM that covers a partial area in Duval County, but this facility is not located within that area.

The existing facility belongs to one of the 28 PSD Major Facility Categories (Secondary Metal Production Plants) listed in definition of major stationary source in Rule 62-210.200, F.A.C. Potential emissions of at least one pollutant from the plant are greater than 100 tons per year. Therefore, the plant is an existing PSD-major facility. New projects at PSD-major facilities must be reviewed for the applicability of the Prevention of Significant Deterioration (PSD) of Air Quality pursuant to Rules 62-210.200(Definitions) and 62-212.400(PSD), F.A.C.

As previously described, the existing plant is being modernized and is still under construction. The old equipment is being replaced. The modernized plant underwent PSD preconstruction review for CO, NO_x, PM/PM_{10}, SO_2 and VOC emissions. It is being constructed in accordance with Permit No. 0310157-008-AC (PSD-FL-349A), which authorizes a new melt shop, a new EAF, a new LMF, and a new BRF to operate with the existing BRF.

Project Review

The affected emissions unit for this project is the new EAF (EU-008) that is currently under construction in accordance with Permit No. 0310157-008-AC (PSD-FL-349A). This permit establishes new emissions standards based on the Best Available Control Technology (BACT) for CO, NO_x, PM/PM_{10}, SO_2 and VOC emissions. There is no request for increased production or capacity. Since construction on the modernization project is not yet complete, the use of tires will not result in any increase of potential emissions. Therefore, the applicant's request results in a minor modification to the existing PSD permit.

The modified draft permit will authorize the use of tires (shredded or whole) as a carbon source alternative to petroleum coke. Separate performance tests will be required after completion of construction of the new EAF: one set of tests while using petroleum coke and no tires; and another set of tests while using tires and no petroleum coke. Accordingly, changes were made to previous Permit No. 0310157-008-AC (PSD-FL-349A) in Specific Condition B.4, Specific Condition B.32, and the placard page project description.

3. AIR QUALITY ANALYSIS

Since this project will not result in an increase in emissions, no additional air quality analysis is required.

4. CONCLUSION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Bruce Mitchell is the project engineer and Jeff Koerner is the supervising Professional Engineer. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

Gerdau Ameristeel
Jacksonville Steel Mill

Facility ID No. 0310157
Duval County

Air Construction Permit Project No. 0310157-009-AC
PSD Permit Project No. PSD-FL-349B
{Revises Permit Nos. 0310157-008-AC and PSD-FL-349A}

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114
Fax: 850/922-6979
Fax: 850/921-9533

Compliance Authority:
Environmental Resource Management Department
Environmental Quality Division
117 West Duval Street, Suite 225
Jacksonville, Florida 32202
Telephone: (904)630-4900
Fax: (904)630-3638

PERMITTEE:
Gerdau Ameristeel
16770 Rebar Road
Baldwin, FL 32234

Authorized Representative:
Mr. Donald Shumake, V.P. and General Manager

Permit No. 0310157-009-AC
PSD Permit No. PSD-FL-349B
Facility ID No. 0310157
Expiration Date: September 28, 2008
Project: Modernization Project
(Modification for Tires)

Facility Description

Gerdau Ameristeel operates the existing Jacksonville Steel Mill (SIC No. 3390), which is located at 16770 Rebar Road in Baldwin, Duval County, Florida. The plant is a secondary metal production facility that recycles scrap iron and steel. The map coordinates are: UTM Zone 17, 405.7 km East, 3350.2 km North; Latitude: 30° 16' 52" / Longitude: 81° 58' 50".

Project Description

On September 21, 2005, the Department of Environmental Protection (Department) issued Permit No. 0310157-007-AC (PSD-FL-349) to modernize the plant by constructing a new melt shop, a new electric arc furnace (EAF), a new ladle metallurgical furnace (LMF), and a new billet reheat furnace (BRF). The project was subject to preconstruction review in accordance with the Prevention of Significant Deterioration (PSD) of Air Quality. The PSD permit for the modernization project resulted in determinations of the Best Available Control Technology (BACT) for carbon monoxide (CO), nitrogen oxides (NO_X), particulate matter (PM/PM_{10}), sulfur dioxide (SO_2) and volatile organic compounds (VOC). On May 5, 2006, the Department issued Permit No. 0310157-008-AC/PSD-FL-349A to modify the PSD permit by authorizing construction of a new gas-fired BRF to allow for the simultaneous processing of steel billets. The existing BRF will be dedicated to producing rebar and the new BRF will be dedicated to producing wire or rod.

For this new PSD permit modification, the Department authorizes the use of shredded or whole tires as a source of carbon in the EAF and as an alternative to petroleum coke. The use of tires as a carbon source in steel production has been proven within the industry. After completing construction on the new EAF, this permit modification requires separate sets of performance tests for petroleum coke and tires. The permittee is required to demonstrate compliance with all permit limits associated with the new EAF under both scenarios.

Referenced attachments made a part of this permit:
Appendix SS-1, Stack Sampling Facilities
Table 297.310-1, Calibration Schedule
Attachment, 40 CFR 60, Subpart A
Figure 1, Summary Report of Gaseous and Opacity Excess Emissions and Monitoring Systems Performance Report

Joseph Kahn, Director
Division of Air Resource Management

(Date)

JK/tlv/jk/bm

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does no relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permitted to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

a. Have access to and copy any record that must be kept under the conditions of the permit;
b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

a. A description of and cause of non-compliance; and,
b. The period of non-compliance, including dates and times; or, if not corrected, the anticipated time the non- compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

GENERAL CONDITIONS:

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:
    (x) Determination of Best Available Control Technology (BACT)
    (x) Determination of Prevention of Significant Deterioration (PSD)
    (x) Compliance with New Source Performance Standards (NSPS)
    ( ) Compliance with National Emission Standards for Hazardous Air Pollutants/ Maximum Available Control Technology (MACT)

14. The permittee shall comply with the following:
    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
    c. Records of monitoring information shall include:
        - the date, exact place, and time of sampling or measurements;
        - the person responsible for performing the sampling or measurement;
        - the dates analyses were performed;
        - the person responsible for performing the analyses;
        - the analytical techniques or methods used; and
        - the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

A. The following specific conditions apply facility-wide:

1. 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), F.A.C.; and, Rule 2.1001, JEPB]

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 20 percent opacity in accordance with Rule 62-296.320(4)(b)1., F.A.C., and Rule 2.1001, JEPB. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C., and Rule 2.1101, JEPB. Testing shall be required upon request of the Department.
[Rule 62-296.320(4)(b)1., F.A.C.; and, Rule 2.1101, JEPB]

3. 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), F.A.C.; and, Rule 2.1001, JEPB]

4. 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), F.A.C.; and, Rules 2.501 and 2.1301, JEPB]

5. Unconfined Particulate Matter Emissions. Unconfined particulate matter emissions from yard operations, open stock piling of materials and/or materials handling operations, such as the slag handling operations (including, but not limited to, screening, crushing, and sizing operations of steel slag), shall be controlled by using the following reasonable precautions when visible emissions are equal to or greater than 20 percent opacity.
a. Reduced speed for vehicular traffic in the plant to 5 miles per hour.
b. Use of liquid resinous adhesives or other liquid (water) dust suppressants or wetting agents.
c. Use of paving or other asphaltic materials.
d. Removal of particulate matter from paved roads and/or other paved areas by vacuum cleaning or otherwise by wetting prior to sweeping.
e. Covering of trucks, trailers, front end loaders, and other vehicles or containers to prevent spillage of particulate matter during transport.
f. Use of mulch, hydroseeding, grassing, and/or other vegetative ground cover on barren areas to prevent or reduce particulate matter from being windblown.
g. Use of hoods, fans, filters, and similar equipment to contain, capture, and vent particulate matter.
h. Enclosures or covering of conveyor systems.
[Rules 62-296.320(4)(b) & (c)2., F.A.C.; 0310157-004-AC/PSD-FL-261; Rule 2.1001, JEPB; and, 0310157-007-AC/PSD-FL-349]

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

Environmental Resource Management Department
Environmental Quality Division
117 West Duval Street, Suite 225
Jacksonville, FL 32202
Telephone: 904/630-4900
Fax: 904/630-3638

7. 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, Pesticides & Toxics Management Division
Air & EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, GA 30303-8960
Telephone: (404) 562-9155
Fax: (404) 562-9163

8. 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].

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

10. Construction and Expiration: The permit expiration date includes sufficient time to complete construction, perform required testing, submit test reports, and submit an application for a Title V operation permit to the Department. Approval to construct shall become invalid for any of the following reasons: construction is not commenced within 18 months after issuance of this permit; construction is discontinued for a period of 18 months or more; or construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. In conjunction with an extension of the 18-month period to commence or continue construction (or to construct the project in phases), the Department may require the permittee to demonstrate the adequacy of any previous determination of Best Available Control Technology (BACT) for emissions units regulated by the project. For good cause, the permittee may request that this PSD air construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit.
[Rules 62-4.070(4), 62-4.080, 62-210.300(1), and 62-212.400(6)(b), F.A.C.; 40 CFR 52.21(r)(2); 40 CFR 51.166(j)(4)]

11. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.
[Rule 62-4.080, F.A.C.]

12. Relaxations of Restrictions on Pollutant Emitting Capacity. If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7,1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it.
[Rule 62-212.400(2)(g), F.A.C.]

13. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification.
[Rule 62-4.030 and Chapters 62-210 and 62-212, F.A.C.]

14. Title V Air Operation Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions units. The permittee shall apply for a Title V air operation permit at least 180 days (**March 24, 2008**) prior to expiration of this permit, but no later than 180 days after commencing operation, whichever occurs first. To apply for a Title V air operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the ERMD-EQD office.
[Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

B. New Melt Shop Building and EAF (Electric Arc Furnace) Operations and New Continuous Caster Building and LMF (Ladle Metallurgical Furnace) Operations with a New No. 5 Baghouse Control System Serving Its Dust-Handling System and the EAF and LMF Operations: Emissions Units Nos. 008 and 010.

Emissions Unit Descriptions: A new Melt Shop Building will be built along with a new electric arc furnace (EAF) for processing recycled scrap-based steel; and, a new Continuous Caster Building will be built to include the continuous caster operations and the new LMF operations, which will be used for refining the tapped (liquid) steel received from the EAF. Emissions of particulate matter (both PM and PM_{10}) and visible emissions from the EAF's and LMF's operations will be controlled by a new No. 5 baghouse control system. The new No. 5 baghouse control system will also be used to control its associated dust-handling system. Heat will be provided by natural gas fired through low-NO_x oxy-fuel sidewall burners (LNBs) and with electric arcs from carbon electrodes.

Emissions Control: Proper engineering design; firing of natural gas; low-NO_x oxy-fuel sidewall burners (LNBs); low excess air; good combustion practice; a new baghouse control system, designated as Baghouse No. 5, and associated canopy hoods with duct work; Direct-Shell Evacuation Control (DEC) systems (EAF's and LMF's); and, usage of a scrap management plan.

Definitions: 40 CFR 60, Subpart AAa.
a. Electric arc furnace (EAF): means a furnace that produces molten steel and heats the charge materials with electric arcs from carbon electrodes; and, an EAF shall consist of the furnace shell and roof and the transformer.
b. Ladle metallurgical furnace (LMF): means an EAF that does the final refining of the molten steel that it receives from the EAF.
c. Charge: means the addition of iron and steel scrap or other materials into the top of an electric arc furnace.
d. Heat cycle: means the period beginning when scrap is charged to an empty EAF and ending when the EAF tap is completed.
e. Tap: means the pouring of molten steel from an EAF.
f. Dust-handling system: means the equipment used to handle particulate matter collected by the control device for an EAF and consists of the control device dust hoppers, the dust-conveying equipment, any central dust storage equipment, the dust-treating equipment (e.g., pug mill, pelletizer), dust transfer equipment (from storage to truck), and any secondary control devices used with the dust transfer equipment.
g. Refining: means that phase of the steel production cycle during which undesirable elements are removed from the molten steel and alloys are added to reach the final metal chemistry.
h. Direct-shell evacuation control system (DEC system): means a system that maintains a negative pressure within the EAF (and LMF) above the slag or metal and ducts emissions to the control device.
i. Bag leak detection system: means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse to detect bag leaks and other conditions that result in increases in particulate loadings. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, electrodynamic, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

The following specific conditions apply to the emission units described above.

General.

B.0. Post-Construction.
a. The installation of an EAF, a LMF, a continuous caster, DECs, canopy hoods and a baghouse control system No. 5., was authorized in air construction permit (AC), No. 0310157-007-AC/PSD-FL-349, issued September 21, 2005. The construction shall be in accordance with the application and associated documents provided to the Permitting Authority for the issuance of that AC. Any changes to the project that are contrary to those documents and permit shall be reported in writing to the Permitting Authority by the P.E. of Record.
[Rules 62-4.070(3) and 62-4.160(2), F.A.C.]

b. The existing EAF shall be removed from service upon commissioning and establishing normal operation of the new EAF and the initial performance tests have been conducted satisfactorily pursuant to 40 CFR 60.8 and the conditions of this permit.

The existing LMF shall be removed from service upon commissioning and establishing normal operation of the new LMF and the initial performance tests have been conducted satisfactorily pursuant to 40 CFR 60.8 and the conditions of this permit. A letter shall be sent to the City of Jacksonville's Environmental Resource Management Department – Environmental Quality Division (ERMD-EQD) and the Department's Northeast District (NED) offices upon completion of this specific condition. [Rules 62-4.070(3) and 62-212.400(5) & (6), F.A.C.; and, 0310157-007-AC/PSD-FL-349]

B.1.a. 40 CFR 60, Subpart AAa, Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels, shall apply to the emissions units described herein.
b. 40 CFR 60, Subpart A, General Provisions, shall apply to the emissions units described herein.
[Rule 62-204.800, F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60, Subparts A and AAa]

B.2. The owner and operator shall abide by the scrap management plan attached to the permit (see Gerdau Ameristeel: Scrap Receiving Policy and Procedures). The owner or operator shall update this plan as necessary through the Title V air operation permit approval process.
[Rule 62-4.070(3), F.A.C.]

Essential Potential to Emit (PTE) Parameters.

B.3. The maximum heat inputs shall not exceed the following :
a. EAF: 34.6×10^6 Btu per hour firing natural gas.
b. LMF: 34.6×10^6 Btu per hour firing natural gas.
[Rules 62-210.200(PTE) and 62-212.400(5), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.4. Permitted Capacity. The production rates shall not exceed any of the following:
a. EAF:
1. 176 tons of raw materials (scrap steel, fluxes, alloys, carbon source (petroleum coke or tires), etc.) per hour, maximum daily average. (Note: The carbon source represents approximately 1% of the total charge.)
2. 160 tons of tapped steel (liquid) per hour, maximum daily average.
3. 140 billet tons of tapped steel (liquid) per hour, maximum monthly average.
4. 1,192,800 tons of tapped steel (liquid) during any consecutive 12 months.

b. LMF:
1. 160 tons of tapped steel (liquid) per hour, maximum daily average.

[Rules 62-210.200(PTE) and 62-212.400(5), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.5. The allowable hours of operation shall not exceed the following:
a. EAF: 8,520 hours per year.
b. LMF: 8,520 hours per year.
[Rules 62-210.200(PTE) and 62-212.400(5), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

Emission Limitations and Standards.

B.6. Best Available Control Technology Determination.

The following table shows the BACT emission limits, control technology, and test methods determined by the Department for the new EAF and LMF operations:

Pollutant	Emission Limits [1]	Control Technology	Test Methods [2 and 3]
PM as PM/PM_{10}	0.0018 gr/dscf	Direct-shell evacuation control (DEC) systems (fourth hole vent with O_2); and, canopy hoods and new No. 5 baghouse control system	EPA Reference Method 5 40 CFR 60, Appendix A
NO_x	0.33 lb/ton tapped steel	Low-NO_x oxy-fuel sidewall burners (LNBs) and furnace pressure control (good combustion practices – low excess air by the DEC systems)	EPA Reference Method 7, 7A or 7E; 40 CFR 60, Appendix A
SO_2	0.2 lb/ton tapped steel	Scrap management plan and supplemental firing of natural gas	EPA Reference Method 8 40 CFR 60, Appendix A
CO	2.0 lbs/ton tapped steel	DEC systems; and, proper design, operation and control of the combustion process	EPA Reference Method 10 40 CFR 60, Appendix A
VOCs	0.13 lb/ton tapped steel	DEC systems; proper design, operation and control of the combustion process; and, usage of a scrap management plan	EPA Reference Method 18, 25 or 25A 40 CFR 60, Appendix A
Visible Emissions	<3% Opacity: No. 5 baghouse control system <6% Opacity: Melt Shop Roof and Continuous Caster Building Roof	No. 5 baghouse control system and associated roof canopy hoods; and, usage of the associated DEC systems	EPA Reference Method 9 40 CFR 60, Appendix A
Visible Emissions	<10% Opacity: Miscellaneous pickup and transfer points along the dust-handling system for the No. 5 baghouse control system	No. 5 baghouse control system	EPA Reference Method 9 40 CFR 60, Appendix A

[1] Unless otherwise specified, the averaging time for each limit shall be in accordance with the test method.

[2] For the EAF and LMF operations, the sampling time and sample volume of each PM test run shall be at least 4 hours and 160 dscf, respectively, and the sampling time shall include an integral number of heats. Compliance with the CO standard shall be based on the average of three (3) 3-hour test runs.
[Rule 62-204.800, F.A.C., and 40 CFR 60.275a(e)(1)]

[3] Compliance tests on the EAF and LMF operations shall be conducted at a minimum production rate of 144 tons per hour (TPH) tapped steel per Rules 62-297.310(2) & (2)(b), F.A.C. [160 TPH x 90% = 144 TPH tapped steel]

B.7. Particulate matter (PM/PM_{10}) emissions shall not exceed 0.0018 grains per dry standard cubic foot (gr/dscf), 12.88 lbs/hr, and 54.9 TPY from the combined operations of the EAF and LMF, including the dust-handling system, based on the average of three (3) test runs conducted in accordance with EPA Reference Method 5 (as described in 40 CFR 60, Appendix A) and consistent with the requirements of 40 CFR 60.275a(e)(1). (See specific condition **B.33.**)
[Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.8. Visible Emissions (VE).
a. VE from the control device, the No. 5 baghouse control system, shall be less than 3 percent opacity.
[40 CFR 60.272a(a)(2); Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

b. VE from any opening in the melt shop building or continuous caster building shall be less than 6 percent opacity.
[40 CFR 60.272a(a)(3); Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

c. VE from any pickup points along the dust-handling system connected with the No. 5 baghouse control system shall be less than 10 percent opacity. Such points include the baghouse hoppers, enclosed screw conveyors or enclosed chain/paddle conveyors, dust silo building, and the enclosed loading building for the truck and rail load-out operations.
[40 CFR 60.272a(b); Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.9. Carbon monoxide (CO) emissions shall not exceed 2.0 lbs/ton of steel, 320.0 pounds per hour, and 1,192.80 TPY from the combined operations of the EAF and LMF, based on the average of three (3) 3-hour test runs conducted in accordance with EPA Reference Method 10 (as described in 40 CFR 60, Appendix A).
[Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.10. Nitrogen oxides (NO_x) emissions shall not exceed 0.33 lb/ton of steel, 52.8 lbs/hr, and 196.8 TPY from the combined operations of the EAF and LMF, based on the average of three (3) test runs conducted in accordance with EPA Reference Method 7, 7A or 7E (as described in 40 CFR 60, Appendix A).
[Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.11. Volatile organic compounds (VOC) emissions shall not exceed 0.13 lb/ton of steel, 20.8 lbs/hr, and 77.5 TPY from the combined operations of the EAF and LMF, based on the average of three (3) test runs conducted in accordance with EPA Reference Method 18, 25, or 25A (as described in 40 CFR 60, Appendix A).
[Rule 62-212.400(1), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.12. Lead (Pb) emissions shall not exceed 0.00195 lb/ton of steel produced, 0.312 lb/hr, and 1.163 TPY from the combined operations of the EAF and LMF, based on the average of three (3) test runs conducted in accordance with EPA Reference Method 12 (as described in 40 CFR 60, Appendix A).
[Rules 62-4.070(3) and 62-212.400(1), (2)(d)4. and (2)(g) , F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

Excess Emissions

B.13. Excess emissions resulting from startup, shutdown or malfunction of any emissions 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.
[Rule 62-210.700(1), F.A.C.; and, Part III, Rule 2.301, JEPB]

B.14. 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.
[Rule 62-210.700(4), F.A.C.; and, Part III, Rule 2.301, JEPB]

Emissions Monitoring.

B.15. Observations of the opacity of the visible emissions from the control device shall be performed by a certified visible emission observer in accordance with 40 CFR 60.273a(c). Visible emission observations shall be conducted at least once per day for at least three 6-minute periods when the furnace is operating in the melting and refining period. All visible emission observations shall be conducted in accordance with EPA Reference Method 9. If visible emissions occur from more than one point, the opacity shall be recorded for any points where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In that case, the EPA Reference Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of the emission limit specified in 40 CFR 60.272a(a). "Furnace" means the EAF (melting) and the LMF (refining).
[40 CFR 60.273a(c); and, Rule 2.201, JEPB]

B.16. A furnace static pressure monitoring device is not required on the EAF nor the LMF because each is equipped with a DEC system. Observations of shop opacity shall be performed by a certified visible emission observer as follows: Shop opacity observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with EPA Reference Method 9. Shop opacity shall be recorded for any point(s) where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of

visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. "Shop" shall include both the melt shop building and the continuous caster building; and, "furnace" means the EAF (melting) and the LMF (refining).
[40 CFR 60.273a(d); and, Rule 2.201, JEPB]

B.17. A bag leak detection system must be installed and continuously operated on the No. 5 Baghouse control system because the owner or operator elected not to install and operate a continuous opacity monitoring system as provided for under 40 CFR 60.273a(c). In addition, the owner or operator shall meet the visible emissions observation requirements in 40 CFR 60.273a(c) (see specific condition **B.15.**). The bag leak detection system must meet the specifications and requirements of 40 CFR 60.273a(e)(1) through (8).
(1) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less.
(2) The bag leak detection system sensor must provide output of relative particulate matter loadings and the owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger.)
(3) The bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate loading is detected over the alarm set point established according to 40 CFR 60.273a(e)(4), and the alarm must be located such that it can be heard by the appropriate plant personnel.
(4) For each bag leak detection system required by 40 CFR 60.273a(e), the owner or operator shall develop and submit to the permitting authority, for approval, a site-specific monitoring plan that addresses the items identified in paragraphs (i) through (v) of 40 CFR 60.273a(e)(4). For each bag leak detection system that operates based on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document ``Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). The owner or operator shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following:
(i) Installation of the bag leak detection system;
(ii) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established;
(iii) Operation of the bag leak detection system including quality assurance procedures;
(iv) How the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list; and,
(v) How the bag leak detection system output shall be recorded and stored.
(5) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time (if applicable).
(6) Following initial adjustment, the owner or operator shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the permitting authority except as provided for in 40 CFR 60.273a(e)(6)(i) and (ii).
(i) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects including temperature and humidity according to the procedures identified in the site-specific monitoring plan required under 40 CFR 60.273a(e)(4).
(ii) If opacities greater than zero percent are observed over four consecutive 15-second observations during the daily opacity observations required under 40 CFR 60.273a(c) and the alarm on the bag leak detection system does not sound, the owner or operator shall lower the alarm set point on the bag leak detection system to a point where the alarm would have sounded during the period when the opacity observations were made.
(7) For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detection sensor must be installed downstream of the baghouse and upstream of any wet scrubber.
(8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
[40 CFR 60.273a(e)(1) thru (8)]

B.18. For the bag leak detection system installed according to 40 CFR 60.273a(e), the owner or operator shall initiate procedures to determine the cause of all alarms within 1 hour of an alarm. Except as provided for under 40 CFR 60.273a(g), the cause of the alarm must be alleviated within 3 hours of the time the alarm occurred by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to, the following:
(1) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in particulate emissions;
(2) Sealing off defective bags or filter media;
(3) Replacing defective bags or filter media or otherwise repairing the control device;

(4) Sealing off a defective baghouse compartment;
(5) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; and,
(6) Shutting down the process producing the particulate emissions.
[40 CFR 60.273a(f)]

B.19. In approving the site-specific monitoring plan required in 40 CFR 60.273a(e)(4), the compliance authority may allow owners or operators more than 3 hours to alleviate specific conditions that cause an alarm if the owner or operator identifies the condition that could lead to an alarm in the monitoring plan, adequately explains why it is not feasible to alleviate the condition within 3 hours of the time the alarm occurred, and demonstrates that the requested additional time will ensure alleviation of the condition as expeditiously as practicable.
[40 CFR 60.273a(g)]

Monitoring of Operations.

B.20. Determination of Process Variables.
(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

B.21. The owner or operator shall maintain records of the following information:
(1) All data obtained under 40 CFR 60.274a(b); and,
(2) All monthly operational status inspections performed under 40 CFR 60.274a(c).
[40 CFR 60.274a(a)]

B.22. Except as provided under 40 CFR 60.274a(e), the owner or operator shall check and record on a once-per-shift basis the furnace static pressure (if DEC system(s) is/are in use, and a furnace static pressure gauge is installed according to 40 CFR 60.274a(f)) and either: check and record the control system fan motor amperes and damper position on a once-per-shift basis; install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood; or install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet and check and record damper positions on a once-per-shift basis. The monitoring device(s) may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow rate monitoring device(s) shall have an accuracy of ±10 percent over its normal operating range and shall be calibrated according to the manufacturer's instructions. The compliance authority may require the owner or operator to demonstrate the accuracy of the monitoring device(s) relative to EPA Reference Methods 1 and 2 of Appendix A, 40 CFR 60. "Furnace" means both the EAF and the LMF.
[40 CFR 60.274a(b)]

B.23. When the owner or operator of an affected facility is required to demonstrate compliance with the standards under 40 CFR 60.272a(a)(3) and at any other time that the compliance authority may require (under section 114 of the CAA, as amended) either: the control system fan motor amperes and all damper positions, the volumetric flow rate through each separately ducted hood, or the volumetric flow rate at the control device inlet and all damper positions shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the affected facility subject to 40 CFR 60.274a(b). The owner or operator may petition the permitting authority for reestablishment of these parameters whenever the owner or operator can demonstrate to the permitting authority's satisfaction that the affected facility operating conditions upon which the parameters were previously established are no longer applicable. The values of these parameters as determined during the most recent demonstration of compliance shall be maintained at the appropriate level for each applicable period. Operation at other than baseline values may be subject to the requirements of 40 CFR 60.276a(c).
[40 CFR 60.274a(c)]

B.24. Except as provided under 40 CFR 60.274a(e), the owner or operator shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in duct-work or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be noted and proper maintenance performed.
[40 CFR 60.274a(d)]

B.25. The owner or operator may petition the permitting authority to approve any alternative to either the monitoring requirements specified in 40 CFR 60.274a(b) or the monthly operational status inspections specified in 40 CFR 60.274a(d) if the alternative will provide a continuous record of operation of each emission capture system.
[40 CFR 60.274a(e)]

B.26. Except as provided for under 40 CFR 60.273a(d), if emissions during any phase of the heat time are controlled by the use of a DEC system, the owner or operator shall install, calibrate, and maintain a monitoring device that allows the pressure in the free space inside the EAF and the LMF to be monitored. The pressure shall be recorded as 15-minute integrated averages. The monitoring device may be installed in any appropriate location in the EAF and the LMF or their DEC duct prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring device shall have an accuracy of ±5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions.
[40 CFR 60.274a(f)]

B.27. Except as provided for under 40 CFR 60.273a(d), when the owner or operator of an EAF and a LMF controlled by a DEC is required to demonstrate compliance with the standard under 40 CFR 60.272a(a)(3), and at any other time the Administrator may require (under section 114 of the Clean Air Act, as amended), the pressure in the free space inside the furnace shall be determined during the meltdown and refining period(s) using the monitoring device required under 40 CFR 60.274a(f). The owner or operator may petition the permitting authority for reestablishment of the pressure whenever the owner or operator can demonstrate to the permitting authority's satisfaction that the EAF and the LMF operating conditions upon which the pressures were previously established are no longer applicable. The pressure determined during the most recent demonstration of compliance shall be maintained at all times when the EAF and/or the LMF is operating in a meltdown and refining period. Operation at higher pressures may be considered by the compliance authority to be unacceptable operation and maintenance of the affected facility.
[40 CFR 60.274a(g)]

B.28. During any performance test required under 40 CFR 60.8, and for any report thereof required by 40 CFR 60.276a(f), or to determine compliance with 40 CFR 60.272a(a)(3), the owner or operator shall monitor the following information for all heats covered by the test:
(1) Charge weights and materials, and tap weights and materials;
(2) Heat times, including start and stop times, and a log of process operation, including periods of no operation during testing and the pressure inside an EAF and a LMF when direct-shell evacuation control systems are used;
(3) Control device operation log; and,
(4) Continuous opacity monitor or EPA Reference Method 9 data.
[40 CFR 60.274a(h)]

Test Methods and Procedures

B.29. During performance tests required in 40 CFR 60.8, the owner or operator shall not add gaseous diluents to the effluent gas stream after the fabric in any pressurized fabric filter collector, unless the amount of dilution is separately determined and considered in the determination of emissions.
[40 CFR 60.275a(a)]

B.30. When emissions from any EAF and/or LMF are combined with emissions from facilities not subject to the provisions of 40 CFR 60, Subpart AAa, but controlled by a common capture system and control device, the owner or operator shall use either or both of the following procedures during a performance test (see also 40 CFR 60.276a(e)):
(1) Determine compliance using the combined emissions.
(2) Use a method that is acceptable to the Administrator and that compensates for the emissions from the facilities not subject to the provisions of 40 CFR 60, Subpart AAa.
[40 CFR 60.275a(b)]

B.31. When emissions from any EAF and/or LMF are combined with emissions from facilities not subject to the provisions of 40 CFR 60, Subpart AAa, the owner or operator shall demonstrate compliance with 40 CFR 60.272(a)(3) based on emissions from only the affected facility(ies).
[40 CFR 60.275a(c)]

B.32. Initial Performance Tests.

a. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in Appendix A, 40 CFR 60, or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).
[40 CFR 60.275a(d)]

b. The permittee shall notify the Compliance Authority in writing of the date that the new EAF (EU-008) achieved the maximum production rate at which the affected facility will be operated pursuant to 40 CFR 60.8. Within 60 days after achieving the maximum production rate at which the EAF will be operated, but not later than 180 days after initial startup of the EAF, the permittee shall conduct the required performance tests to demonstrate compliance with the emissions standards for the EAF. Separate sets of initial tests shall be conducted for the following carbon sources: petroleum coke only; and used tires (shredded or whole) only. The initial performance tests shall be conducted at permitted capacity and shall not exceed the permitted capacities specified in this construction permit. During each set of performance tests, the permittee shall document and record the following:

1. Date performed and duration;
2. Liquid steel production;
3. EAF charging rate of all materials/constituents;
4. Sulfur content (percent by weight) of the petroleum coke used;
5. Volumetric flow rate (acfm and dscfm);
6. Flue gas moisture percent, oxygen content and temperature;
7. Continuous emissions monitoring systems (CEMS) data; and,
8. Any continuous monitoring systems (CMS) data required by permit.

The above information shall be summarized for each test run in the required test report.

[App. No. 0310157-009-AC; 40 CFR 60.8; and, Rules 62-4.070(3) and 62-297.310(2), (2)(b), (7)(a)1. & 8, F.A.C.]

B.33. The owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.272a as follows:
(1) EPA Reference Method 5 shall be used for negative-pressure fabric filters and other types of control devices and EPA Reference Method 5D shall be used for positive-pressure fabric filters to determine the particulate matter concentration and volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 4 hours and 4.50 dscm (160 dscf) and, when a single EAF and LMF are sampled, the sampling time shall include an integral number of heats.
(3) Method 9 and the procedures of 40 CFR 60.11 shall be used to determine opacity.
(4) To demonstrate compliance with 40 CFR 60.272a(a) (1), (2), and (3), the Method 9 test runs shall be conducted concurrently with the particulate matter test runs, unless inclement weather interferes.
[40 CFR 60.275a(e)(1), (3) and (4)]

B.34. To comply with 40 CFR 60.274a(c), (f), (g), and (h), the owner or operator shall obtain the information required in these paragraphs during the particulate matter runs. (see specific conditions **B.23.**, **B.26.**, **B.27.**, and **B.28.**, respectively)
[40 CFR 60.275a(f)]

B.35. Any control device subject to the provisions of 40 CFR 60, Subpart AAa, shall be designed and constructed to allow measurement of emissions using applicable test methods and procedures.
[40 CFR 60.275a(g)]

B.36. Where emissions from any EAF and/or LMF are combined with emissions from facilities not subject to the provisions of this subpart but controlled by a common capture system and control device, the owner or operator may use any of the following procedures during a performance test:
(1) Base compliance on control of the combined emissions;
(2) Utilize a method acceptable to the Administrator that compensates for the emissions from the facilities not subject to the provisions of 40 CFR 60, Subpart AAa; or,
(3) Any combination of the criteria of 40 CFR 60.275a(h)(1) and (h)(2).
[40 CFR 60.275a(h)]

B.37. Where emissions from any EAF and/or LMF are combined with emissions from facilities not subject to the provisions of 40 CFR 60, Subpart AAa, determinations of compliance with 40 CFR 60.272a(a)(3) will only be based upon emissions originating from the affected facility(ies).
[40 CFR 60.275a(i)]

B.38. Unless the presence of inclement weather makes concurrent testing infeasible, the owner or operator shall conduct concurrently the performance tests required under 40 CFR 60.8 to demonstrate compliance with 40 CFR 60.272a(a)(1), (2), and (3) of 40 CFR 60, Subpart AAa.
[40 CFR 60.275a(j)]

B.39. PM. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 5 (as described in 40 CFR 60, Appendix A) and 40 CFR 60.275a(e)(1) for PM. Tests shall be conducted initially and annually. (See specific condition **B.33.**)
[40 CFR 60.275(e)(1); Rules 62-212.400(BACT) and 62-297.310, F.A.C.; Rule 2.1101, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.40. VE. Testing for demonstration of compliance shall be performed concurrently with the PM test in accordance with EPA Reference Method 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity. (See specific condition **B.33.**)
[40 CFR 60.275(e)(4); Rule 62-297.310, F.A.C.; Rule 2.1101, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.41. CO. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 10 (as described in 40 CFR 60, Appendix A) for CO. Tests shall be conducted initially and annually.
[Rules 62-212.400(BACT) and 62-297.310, F.A.C.; Rule 2.1101, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.42. NO_x. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 7, 7A or 7E (as described in 40 CFR 60, Appendix A) for NO_x (as NO_2). Tests shall be conducted initially and annually.
[Rules 62-212.400(BACT) and 62-297.310, F.A.C.; Rule 2.1101, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.43. VOC. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 18, 25, or 25A (as described in 40 CFR 60, Appendix A) for VOC. Tests shall be conducted initially and annually.
[Rules 62-212.400(BACT) and 62-297.310, F.A.C.; Rule 2.1101, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.44. Pb. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 12 (as described in 40 CFR 60, Appendix A) for Pb. Tests shall be conducted initially and annually.
[Rules 62-212.400(2)(g) and 62-297.310, F.A.C.; Rule 2.1101, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.45. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day

period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

B.46. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted 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, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)(b), F.A.C.; Rule 2.1301, JEPB; and, 0310157-007-AC/PSD-FL-349]

B.47. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

B.48. Applicable Test Procedures.
(a) Required Sampling Time.
1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached as part of this permit.
(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

B.49. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

B.50. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid fuel for more than 400 hours other than during startup.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the permitting authority shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

a. Did not operate; or

b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1– September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

a. Visible emissions, if there is an applicable standard;

b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and

c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

9. The owner or operator shall notify the ERMD-EQD and DEP-NED, at least 30 days prior to the initial NSPS performance test and 15 days prior to the date on which each subsequent formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the ERMD-EQD or DEP-NED, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the ERMD-EQD and DEP-NED.

[Rule 62-297.310(7), F.A.C.; Part XI, Rule 2.1101, JEPB; 40 CFR 60.8; and, SIP approved]

Recordkeeping and Reporting Requirements

B.51. Records of the measurements required in 40 CFR 60.274a must be retained for at least 5 years following the date of the measurement.

[40 CFR 60.276a(a); Rule 62-213.440(1)(b), F.A.C.; and, Rule 2.501, JEPB]

B.52. Each owner or operator shall submit a written report of exceedances of the control device opacity to the compliance authority semi-annually. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity is 3 percent or greater.

[40 CFR 60.276a(b)]

B.53. Operation at a furnace static pressure that exceeds the value established under 40 CFR 60.274a(g) and either operation of control system fan motor amperes at values exceeding ±15 percent of the value established under 40 CFR 60.274a(c) or operation at flow rates lower than those established under 40 CFR 60.274a(c) may be considered by the compliance authority to be unacceptable operation and maintenance of the affected facility. Operation at such values shall be reported to the compliance authority semiannually.

[40 CFR 60.276a(c)]

B.54. The requirements of 40 CFR 60.276a remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance

adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with this section, provided that they comply with the requirements established by the State.
[40 CFR 60.276a(d)]

B.55. When the owner or operator of an EAF and/or LMF are required to demonstrate compliance with the standard under 40 CFR 60.275a(b)(2) or a combination of (b)(1) and (b)(2), the owner or operator shall obtain approval from the permitting authority of the procedure(s) that will be used to determine compliance. Notification of the procedure(s) to be used must be postmarked at least 30 days prior to the performance test.
[40 CFR 60.276a(e)]

B.56. For the purpose of this subpart, the owner or operator shall conduct the demonstration of compliance with 40 CFR 60.272a(a) of this subpart and furnish the compliance authority a written report of the results of the test. This report shall include the following information:
(1) Facility name and address;
(2) Plant representative;
(3) Make and model of process, control device, and continuous monitoring equipment;
(4) Flow diagram of process and emission capture equipment including other equipment or process(es) ducted to the same control device;
(5) Rated (design) capacity of process equipment;
(6) Those data required under § 60.274a(h) of this subpart;
  (i) List of charge and tap weights and materials;
  (ii) Heat times and process log;
  (iii) Control device operation log; and
  (iv) Continuous monitor or Reference Method 9 data.
(7) Test dates and test times;
(8) Test company;
(9) Test company representative;
(10) Test observers from outside agency;
(11) Description of test methodology used, including any deviation from standard reference methods;
(12) Schematic of sampling location;
(13) Number of sampling points;
(14) Description of sampling equipment;
(15) Listing of sampling equipment calibrations and procedures;
(16) Field and laboratory data sheets;
(17) Description of sample recovery procedures;
(18) Sampling equipment leak check results;
(19) Description of quality assurance procedures;
(20) Description of analytical procedures;
(21) Notation of sample blank corrections; and,
(22) Sample emission calculations.
[40 CFR 60.276a(f)]

B.57. The owner or operator shall maintain records of all shop (melt shop and continuous caster buildings) opacity observations made in accordance with 40 CFR 60.273a(d). All shop (melt shop roof and continuous caster building roof) opacity observations in excess of the emission limit specified in 40 CFR 60.272a(a)(3) of 40 CFR 60, Subpart AAa, shall indicate a period of excess emission, and shall be reported to the compliance authority semi-annually, according to 40 CFR 60.7(c).
[40 CFR 60.276a(g)]

B.58. The owner or operator shall maintain the following records for each bag leak detection system required under 40 CFR 60.273a(e):
(1) Records of the bag leak detection system output;
(2) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and,
(3) An identification of the date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, if procedures were initiated within 1 hour of the alarm, the cause of the alarm, an explanation

of the actions taken, the date and time the cause of the alarm was alleviated, and if the alarm was alleviated within 3 hours of the alarm.
[40 CFR 60.276a(h)]

B.59. The owner or operator shall keep records of steel production to demonstrate compliance with the steel production capacities specified in this permit.
[Rule 62-4.070(3), F.A.C.]

C. BRF (Billet Reheat Furnace). Rebar Mill BRF: Emissions Unit No. 009 and Wire/Rod Mill BRF: Emissions Unit No. 011.

Emissions Unit Descriptions: The facility processes steel billets into steel rebar, wire and rod. This is accomplished by reheating the steel billets that are either imported and/or produced by the continuous caster in the Rebar Mill BRF and processing them through various rolling and wire machines in the rolling and wire mills.

EU-009 The new Rebar Mill BRF (EU-009) will be located immediately south and east of the existing furnace and its stack will be located east of the rolling mill building. The production limits are the same as the new EAF/LMF as follows:

- 160 billet tons of steel per hour, maximum daily average;
- 1,192,800 billet tons of steel per consecutive 12-months; and,
- 8,520 hours per year operation.

EU-011 The proposed new Wire/Rod Mill BRF (EU-011) will be located approximately 150 feet southwest of the new Rebar Mill BRF (EU-009) and north of the new Melt Shop building. The production limits of the new Wire/Rod Mill BRF are:

- 160 billet tons of steel per hour, maximum daily average; and,
- 500,000 billet tons of steel per consecutive 12-months.

For the new Wire/Rod Mill BRF, the above production rates may be in addition to the maximum production rates of the EAF/LMF operation due to stored inventory and imported billets delivered to the plant.

Emissions Control: Proper engineering design; firing of natural gas; low-NO_x burners (LNBs); low excess air; good combustion practice, including control of combustion air and temperature, and the firing of natural gas.

Billet: means a semi-finished bar of steel nearly square in section made from the continuous caster operation or imported.

The following specific conditions apply to the emissions unit above.

General.

C.0. Post-Construction.
a. Rebar Mill BRF. The installation of a new Billet Reheat Furnace (BRF), designated now as the "Rebar Mill BRF", was authorized in air construction permit, No. 0310157-007-AC/PSD-FL-349, issued September 21, 2005. The construction shall be in accordance with the application and associated documents provided to the Permitting Authority for the issuance of that Previously issued permit. Any changes to the project that are contrary to those documents and permit shall be reported in writing to the Permitting Authority by the P.E. of Record.
[Rules 62-4.070(3) and 62-4.160(2), F.A.C.; and, 0310157-007-AC/PSD-FL-349]

b. Wire/Rod Mill BRF. This permit authorizes the installation of a Wire/Rod Mill BRF. The construction shall be in accordance with the application and associated documents provided to the Permitting Authority for the issuance of this permit. Any changes to the project that are contrary to those documents and permit shall be reported in writing to the Permitting Authority by the P.E. of Record.
[Rules 62-4.070(3) and 62-4.160(2), F.A.C.; and, 0310157-008-AC/PSD-FL-349A]

Essential Potential to Emit (PTE) Parameters.

C.1. Heat Input While Firing Natural Gas.
a. Rebar Mill BRF and Wire/Rod Mill BRF: The maximum heat input shall not exceed 222.0 x MMBtu per hour.
b. Wire/Rod Mill BRF: The total heat input shall not exceed 792,857 MMBtu per consecutive 12-months (778 MMcu ft per consecutive 12-months @ 1,019 Btu/cu ft).
[Rule 62-212.400(5), F.A.C.; Rule 2.401, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

C.2. Steel processing throughput shall not exceed any of the following:
a. Rebar Mill BRF: 160 billet tons of steel per hour (maximum daily average).
b. Rebar Mill BRF: 1,192,800 billet tons of steel per consecutive 12-months.
[Rule 62-212.400(5), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

c. Wire/Rod Mill BRF: 160 billet tons of steel per hour (maximum daily average).
d. Wire/Rod Mill BRF: 500,000 billet tons of steel per consecutive 12-months.
[Rule 62-212.400(5), F.A.C.; Rule 2.401, JEPB; and, 0310157-008-AC/PSD-FL-349A]

C.3. The hours of operation shall not exceed:
a. Rebar Mill BRF: 8,520 hours per year.
[Rule 62-212.400(5), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

b. Wire/Rod Mill BRF: not restricted.
[Rule 62-212.400(5), F.A.C.; Rule 2.401, JEPB; and, 0310157-008-AC/PSD-FL-349A]

Emission Limitations and Standards

C.4. Best Available Control Technology Determination.

The following table shows the BACT emission limits, control technology, and test methods determined by the Department for the Rebar Mill BRF operations and the Wire/Rod Mill BRF operations:

Pollutant	Emission Limits [1]	Control Technology	Test Methods [2]
PM as PM/PM_{10}	--	Firing natural gas	--
NO_x	0.08 lb/MMBtu	Low-NO_x burners (LNBs); and, good combustion practices and low excess air	EPA Reference Method 7, 7A or 7E; 40 CFR 60, Appendix A
SO_2	--	Firing natural gas	--
CO	0.035 lb/MMBtu	Proper furnace design and good combustion practices, including control of combustion air and temperature	EPA Reference Method 10 40 CFR 60, Appendix A
VOCs	--	Firing natural gas; and, proper furnace design and good combustion practices, including control of combustion air and temperature	--
Visible Emissions	≤10% opacity, except for one 6-min period per hour in which the opacity shall not exceed 20%	Firing natural gas	EPA Reference Method 9 40 CFR 60, Appendix A

[1] The averaging time for each limit shall be in accordance with the test method.
[2] Compliance tests on each BRF operation shall be conducted at a minimum rate of 144 billet tons per hour (BTPH) per Rules 62-297.310(2) & (2)(b), F.A.C. [160 BTPH x 90% = 144 BTPH].
[Rules 62-4.070(3) and 62-212.400(PSD NSR & BACT), F.A.C.; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

C.5. PM/PM_{10}, SO_2 and VOC. Emissions shall be limited by firing natural gas.
[Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

C.6. VE. VE shall not exceed 10 percent opacity, except for one 6-minute period per hour during which the opacity shall not exceed 20 percent.
[Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

C.7. CO. CO emissions shall not exceed:
a. Rebar Mill BRF: 0.035 lb/MMBtu, 7.77 lbs/hr, and 33.02 TPY, based on the average of three (3) test runs conducted in accordance with EPA Reference Method 10 (as described in 40 CFR 60, Appendix A).
[Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

b. Wire/Rod Mill BRF: 0.035 lb/MMBtu, 7.77 lbs/hr, and 13.9 TPY, based on the average of three (3) test runs conducted in accordance with EPA Reference Method 10 (as described in 40 CFR 60, Appendix A).
[Rule 62-210.200(Definitions - BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-008-AC/PSD-FL-349A]

C.8. NO_x. NO_x emissions shall not exceed:
a. Rebar Mill BRF: 0.08 lb/MMBtu, 17.76 lbs/hr, and 75.7 TPY, based on the average of three (3) test runs conducted in accordance with EPA Reference Method 7, 7A or 7E (as described in 40 CFR 60, Appendix A).
[Rule 62-212.400(BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-007-AC/PSD-FL-349]

b. Wire/Rod Mill BRF: 0.08 lb/MMBtu, 17.76 lbs/hr, and 31.7 TPY, based on the average of three (3) test runs conducted in accordance with EPA Reference Method 7, 7A or 7E (as described in 40 CFR 60, Appendix A).
[Rule 62-210.200(Definitions - BACT), F.A.C.; Rule 2.401, JEPB; and, 0310157-008-AC/PSD-FL-349A]

Excess Emissions

C.9. Excess emissions resulting from startup, shutdown or malfunction of any emissions 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.
[Rule 62-210.700(1), F.A.C.; and, Part III, Rule 2.301, JEPB]

C.10. 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.
[Rule 62-210.700(4), F.A.C.; and, Part III, Rule 2.301, JEPB]

Monitoring of Operations.

C.11. Determination of Process Variables.
(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

Test Methods and Procedures

C.12. VE. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity. Tests shall be conducted initially and annually.
[40 CFR 60.275(e); Rule 62-297.310, F.A.C.; Rule 2.1101, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

C.13. CO. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 10 (as described in 40 CFR 60, Appendix A) for CO. Tests shall be conducted initially and upon renewal.
[40 CFR 60.275(e); Rule 62-297.310, F.A.C.; Rule 2.1101, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

C.14. NO_x. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 7, 7A or 7E (as described in 40 CFR 60, Appendix A) for NO_x. Tests shall be conducted initially and upon renewal.
[40 CFR 60.275(e); Rule 62-297.310, F.A.C.; Rule 2.1101, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

C.15. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

C.16. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted 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, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)(b), F.A.C.; Rule 2.1301, JEPB; and, 0310157-007-AC/PSD-FL-349]

C.17. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

C.18. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

   a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.

   b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

   c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached as part of this permit.
(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

C.19. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

C.20. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
(a) General Compliance Testing.
2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid fuel for more than 400 hours other than during startup.
3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the permitting authority shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
a. Did not operate; or
b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1– September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
a. Visible emissions, if there is an applicable standard;
b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
9. The owner or operator shall notify the ERMD-EQD and DEP-NED, at least 30 days prior to the initial NSPS performance test and 15 days prior to the date on which each subsequent formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
(b) Special Compliance Tests. When the ERMD-EQD or DEP-NED, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the ERMD-EQD and DEP-NED.
[Rule 62-297.310(7), F.A.C.; Part XI, Rule 2.1101, JEPB; 40 CFR 60.8; and, SIP approved]

Recordkeeping and Reporting Requirements

C.21. Monthly records shall be maintained for the following:
a. Rebar Mill BRF and Wire/Rod Mill BRF: Billet tons of steel processed per month.
b. Rebar Mill BRF: Hours of operation.
c. Wire/Rod Mill BRF: Cubic feet of natural gas fired.
[Rule 62-212.400(5), F.A.C.; Rule 2.401, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

C.22. Records shall be maintained for a minimum of five (5) years and made available to the Department upon request.
[Rule 62-213.440(1)(b), F.A.C.; Rule 2.501, JEPB; 0310157-007-AC/PSD-FL-349; and, 0310157-008-AC/PSD-FL-349A]

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

Stack Sampling Facilities Provided by the Owner of an Emissions Unit. This section describes the minimum requirements for stack sampling facilities that are necessary to sample point emissions units. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. Emissions units must provide these facilities at their expense. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches.
2. The ports shall be capable of being sealed when not in use.
3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d) Work Platforms.

1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e) Access to Work Platform.

1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.

2. Walkways over free-fall areas shall be equipped with safety rails and toeboards.

(f) Electrical Power.

1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.

2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

(g) Sampling Equipment Support.

1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.

b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.

c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.

2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.

3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

TABLE 297.310-1 CALIBRATION SCHEDULE
(version dated 10/07/96)

[Note: This table is referenced in Rule 62-297.310, F.A.C.]

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually	Spirometer or calibrated wet test or dry gas test meter	2%
	3. Check after each test series	Comparison check	5%

[electronic file name: 297310-1.doc]

Attachment "40 CFR 60, Subpart A"

General Provisions

40 CFR 60.1 Applicability.

(a) Except as provided in 40 CFR 60 subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
(b) Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced
after the date of publication in this part of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
(c) In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution controlagency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air Act (CAA) as amended November 15, 1990 (42 U.S.C. 7661).
[Rule 62-204.800, F.A.C.; and, 40 CFR 60.1(a), (b) and (c)]

40 CFR 60.2 Definitions.

(a) *Administrator* means the Administrator of the Environmental Protection Agency or the Secretary or the Secretary's designee.
[Rule 62-204.800(7)(a), F.A.C.; and, 40 CFR 60.2]

40 CFR 60.7 Notification and recordkeeping.

(a) The owner or operator subject to the provisions of this part shall furnish the Administrator written notification as follows:

(1) A notification of the date construction (or reconstruction as defined under 40 CFR 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.

(2) A notification of the anticipated date of initial startup of an affected facility postmarked not more than 60 days nor less than 30 days prior to such date.

(3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

(5) A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c). Notification shall be postmarked not less than 30 days prior to such date.

(6) A notification of the anticipated date for conducting the opacity observations required by 40 CFR 60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.

(7) A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by 40 CFR 60.8 in lieu of Method 9 observation data as allowed by 40 CFR 60.11(e)(5) of 40 CFR 60. This notification shall be postmarked not less than 30 days prior to the date of the performance test.

(b) The owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

(c) The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form (see 40 CFR 60.7(d) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary
to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(d) The summary report form shall contain the information and be in the format shown in Figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

[See Attached Figure 1-Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance]

(e) The owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.
(f) If notification substantially similar to that in 40 CFR 60.7(a) is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of 40 CFR 60.7(a).
(g) Individual subparts of this part may include specific provisions which clarify or make inapplicable the provisions set forth in this section.
[Rule 62-204.800, F.A.C.; and, 40 CFR 60.7(a), (b), (c), (d), (e), (f) and (g)]

40 CFR 60.8 Performance tests.

(a) Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).
(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in 40 CFR 60.8 shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.
(c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
(e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
(2) Safe sampling platform(s).
(3) Safe access to sampling platform(s).
(4) Utilities for sampling and testing equipment.

(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.
[Rule 62-204.800, F.A.C.; and, 40 CFR 60.8(a), (b)(1), (4) & (5), (c), (e) and (f)]

40 CFR 60.10 State authority.

The provisions of 40 CFR 60 shall not be construed in any manner to preclude any State or political subdivision thereof from:
(a) Adopting and enforcing any emission standard or limitation applicable to an affected facility, provided that such emission standard or limitation is not less stringent than the standard applicable to such facility.
(b) Requiring the owner or operator of an affected facility to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of such facility.
[Rule 62-204.800, F.A.C.; and, 40 CFR 60.10(a) and (b)].

40 CFR 60.11 Compliance with standards and maintenance requirements.

(a) Compliance with standards in this part, other than opacity standards, shall be determined by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.
(b) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
(c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
(d) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(e)(1) For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in 40 CFR 60.8 unless one of the following conditions apply. If no performance test under 40 CFR 60.8 is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test required under 40 CFR 60.8, the source owner or operator shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. In these cases, the 30-day prior notification to the Administrator required in 40 CFR 60.7(a)(6) shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under 40 CFR 60.8. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Reference Method 9 of appendix B of this part. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in 40 CFR 60.11(e)(5), the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the source shall meet the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in appendix B of 40 CFR 60, has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.

(2) Except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.
(3) The owner or operator of an affected facility to which an opacity standard in this part applies may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The owner or operator of the affected facility shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in 40 CFR 60.7(a)(6). If, for some reason, the Administrator cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of 40 CFR 60.7(e)(1) shall apply.
(4) The owner or operator of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test required by 40 CFR 60.8 and shall furnish the Administrator a written report of the monitoring results along with Method 9 and 40 CFR 60.8 performance test results.
(5) The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine opacity compliance.
(6) Upon receipt from an owner or operator of the written reports of the results of the performance tests required by 40 CFR 60.8, the opacity observation results and observer certification required by 40 CFR 60.11(e)(1), and the COMS results, if applicable, the Administrator will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to comply with an opacity standard, only those results are required to be submitted along with the performance test results required by 40 CFR 60.8. If the Administrator finds that an affected facility is in compliance with all applicable standards for which performance tests are conducted in accordance with 40 CFR 60.8 of this part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, the shall notify the owner or operator and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility.
(7) The Administrator will grant such a petition upon a demonstration by the owner or operator that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard.

(8) The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity standard in the Federal Register.

(f) Special provisions set forth under an applicable subpart of 40 CFR 60 shall supersede any conflicting provisions of 40 CFR 60.11.

(g) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[Rule 62-204.800, F.A.C.; and, 40 CFR 60.11(a), (b), (c), (d), (e), (f) and (g)]

40 CFR 60.12 Circumvention.

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[Rule 62-204.800, F.A.C.; and, 40 CFR 60.12]

40 CFR 60.13 Monitoring requirements.

(a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

(b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under 40 CFR 60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.

(c) If the owner or operator of an affected facility elects to submit continuos opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he/she shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 40 CFR 60.8 and as described in 40 CFR 60.11(e)(5), shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 40 CFR 60.8 is conducted.

(2) Except as provided in 40 CFR 60.13(c)(1), the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

(d)(1) Owners and operators of all continuous emission monitoring systems installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

(e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(f) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of 40 CFR 60 shall be used.

(g) When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

(h) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorder during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

(i) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of this part including, but not limited to the following:

(1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by this part would not provide accurate measurements due to liquid water or other interferences caused by substances with the effluent gases.

(2) Alternative monitoring requirements when the affected facility is infrequently operated.

(3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.

(4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

(5) Alternative methods of converting pollutant concentration measurements to units of the standards.

(6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.

(7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any subpart.

(8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Administrator may require that such demonstration be performed for each affected facility.

(9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities are released to the atmosphere through more than one point.

(j) An alternative to the relative accuracy test specified in Performance Specification 2 of appendix B may be requested as follows:

(1) An alternative to the reference method tests for determining relative accuracy is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Administrator to waive the relative accuracy test in section 7 of Performance Specification 2 and substitute the procedures in section 10 if the results of a performance test conducted according to the requirements in 40 CFR 60.8 of this subpart or other tests performed following the criteria in 40 CFR 60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Administrator to waive the relative accuracy test and substitute the procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the relative accuracy test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Administrator will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).

(2) The waiver of a CEMS relative accuracy test will be reviewed and may be rescinded at such time following successful completion of the alternative RA procedure that the CEMS data indicate the source emissions approaching the level of the applicable standard. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70 percent of the applicable standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., 40 CFR 60.45(g)(2) and 40 CFR 60.45(g)(3), 40 CFR 60.73(e), and 40 CFR 60.84(e)]. It is the

responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of relative accuracy testing. If this criterion is exceeded, the owner or operator must notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Administrator will review the notification and may rescind the waiver and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2.

[Rule 62-204.800, F.A.C.; and, 40 CFR 60.13(a) thru (j)].

40 CFR 60.14 Modification.

(a) Except as provided under 40 CFR 60.14(e) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

(b) Emission rate shall be expressed as kg/hr (lbs/hour) of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:

(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors", EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in 40 CFR 60.14(b)(1) . When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60 appendix C of 40 CFR 60 shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

(c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.

(d) [Reserved]

(e) The following shall not, by themselves, be considered modifications under this part:

(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.

(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.

(3) An increase in the hours of operation.

(4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.

(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.

(6) The relocation or change in ownership of an existing facility.

(f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.

(g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved.

[Rule 62-204.800, F.A.C.; and, 40 CFR 60.14(a) thru (g)].

40 CFR 60.15 Reconstruction.

(a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.

(b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and

(2) It is technologically and economically feasible to meet the applicable standards set forth in this part.

(c) "Fixed capital cost"' means the capital needed to provide all the depreciable components.

(d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:

(1) Name and address of the owner or operator.

(2) The location of the existing facility.

(3) A brief description of the existing facility and the components which are to be replaced.

(4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.

(5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.

(6) The estimated life of the existing facility after the replacements.

(7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

(e) The Administrator will determine, within 30 days of the receipt of the notice required by 40 CFR 60.15(d) and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.

(f) The Administrator's determination under 40 CFR 60.15(e) shall be based on:

(1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;

(2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;

(3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and

(4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.

(g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.

[Rule 62-204.800, F.A.C.; and, 40 CFR 60.15(a) thru (g)].

Figure 1. Summary Report
Gaseous and Opacity Excess Emission and Monitoring System Performance

Company: _____

Address: _____

Process Unit(s) Description: _____

Emission Limitation: _____

Pollutant *(Circle One)*: SO_2 NO_X TRS H_2S CO Opacity

Reporting Period Dates: From _____ to _____

Total source operating time in reporting period [1]: _____

Monitor Manufacturer: _____

Monitor Model No.: _____

Date of Latest CMS Certification or Audit: _____

Emission Data Summary [1]		**CMS Performance Summary** [1]	
1. Duration of excess emissions in reporting period due to:		1. CMS downtime in reporting period due to:	
a. Startup/shutdown	____	a. Monitor equipment malfunctions	____
b. Control equipment problems	____	b. Non-Monitor equipment malfunctions	____
c. Process problems	____	c. Quality assurance calibration	____
d. Other known causes	____	d. Other known causes	____
e. Unknown causes	____	e. Unknown causes	____
2. Total duration of excess emissions	____	2. Total CMS Downtime	____
3. [Total duration of excess emissions] x (100%) / [Total source operating time]	____ % [2]	3. [Total CMS Downtime] x (100%) / [Total source operating time]	____ % [2]

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted.

On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____

Title: _____

Date: _____

Adams, Patty

From: Harvey, Mary

Sent: Monday, April 09, 2007 2:08 PM

To: 'Mr. Donald R. Shumake, Gerdau Ameristeel'; 'Mr. James P. Wold, Gerdau Ameristeel'; 'Mr. Richard Robinson, ERMD-EQD'; 'Mr. Scott A. McCann, Golder Associates, Inc.'; 'Mr. David LaRocca, Golder Associates, Inc.'

Cc: Mitchell, Bruce; Adams, Patty; Gibson, Victoria

Subject: GERDAU AMERISTEEL - 0310157-009-AC-FINAL

Attachments: 0310157.009.AC.F_pdf.zip

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

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Thank you,

DEP, Bureau of Air Regulation

Adams, Patty

From: Harvey, Mary
Sent: Monday, April 09, 2007 2:11 PM
To: 'little.james@epamail.epa.gov'
Cc: Mitchell, Bruce; Adams, Patty
Subject: FW: GERDAU AMERISTEEL - 0310157-009-AC-FINAL
Attachments: 0310157- 009 AC - FINAL - Notice of final permit letter and FD.PDF; 0310157-009 AC - FINAL - Figure 1 Summary of Gaseous and Opacity Excess Emissions and Monitoring Systems Performance Report.PDF; 0310157-009-AC - FINAL Attachment 40 CFR 60 Subpart A.PDF; 0310157-009-AC - Final Permit - Gerdau Tires.PDF; 0310157-009-AC- FINAL - Table 297 310-1.PDF; 0310157-009-AC-FINAL - Appendix SS-1 Stack Sampling Facilities.PDF; Signed Document - Facility #0310157-009-AC-FINAL.pdf

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From: Harvey, Mary
Sent: Monday, April 09, 2007 2:08 PM
To: 'Mr. Donald R. Shumake, Gerdau Ameristeel'; 'Mr. James P. Wold, Gerdau Ameristeel'; 'Mr. Richard Robinson, ERMD-EQD'; 'Mr. Scott A. McCann, Golder Associates, Inc.'; 'Mr. David LaRocca, Golder Associates, Inc.'
Cc: Mitchell, Bruce; Adams, Patty; Gibson, Victoria
Subject: GERDAU AMERISTEEL - 0310157-009-AC-FINAL

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Thank you,

DEP, Bureau of Air Regulation

Adams, Patty

From: Harvey, Mary
Sent: Wednesday, April 11, 2007 8:53 AM
To: Adams, Patty
Subject: FW: FW: GERDAU AMERISTEEL - 0310157-009-AC-FINAL

-----Original Message-----
From: Little.James@epamail.epa.gov [mailto:Little.James@epamail.epa.gov]
Sent: Tuesday, April 10, 2007 10:40 AM
To: Harvey, Mary
Subject: Re: FW: GERDAU AMERISTEEL - 0310157-009-AC-FINAL

EPA Region 4 received.

Jim Little - EPA Region 4
(404) 562-9118

"Harvey, Mary" <Mary.Harvey@dep.state.fl.us>
04/09/2007 02:10 PM

To: James Little/R4/USEPA/US@EPA
cc: "Mitchell, Bruce" <Bruce.Mitchell@dep.state.fl.us>, "Adams, Patty" <Patty.Adams@dep.state.fl.us>
Subject: FW: GERDAU AMERISTEEL - 0310157-009-AC-FINAL

From: Harvey, Mary
Sent: Monday, April 09, 2007 2:08 PM
To: 'Mr. Donald R. Shumake, Gerdau Ameristeel'; 'Mr. James P. Wold, Gerdau Ameristeel'; 'Mr. Richard Robinson, ERMD-EQD'; 'Mr. Scott A. McCann, Golder Associates, Inc.'; 'Mr. David LaRocca, Golder Associates, Inc.'
Cc: Mitchell, Bruce; Adams, Patty; Gibson, Victoria
Subject: GERDAU AMERISTEEL - 0310157-009-AC-FINAL

Dear Sir/Madam:

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e-mail transmissions to verify receipt of the document(s).

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http://www.adobe.com/products/acrobat/readstep.html.

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Thank you,
DEP, Bureau of Air Regulation

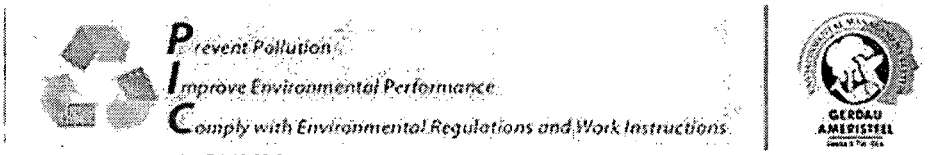
[attachment "0310157- 009 AC - FINAL - Notice of final permit letter and FD.PDF" deleted by James Little/R4/USEPA/US] [attachment "0310157-009 AC - FINAL - Figure 1 Summary of Gaseous and Opacity Excess Emissions and Monitoring Systems Performance Report.PDF" deleted by James Little/R4/USEPA/US] [attachment "0310157-009-AC - FINAL Attachment 40 CFR 60 Subpart A.PDF" deleted by James Little/R4/USEPA/US] [attachment "0310157-009-AC - Final Permit - Gerdau Tires.PDF" deleted by James Little/R4/USEPA/US] [attachment "0310157-009-AC- FINAL - Table 297 310-1.PDF" deleted by James Little/R4/USEPA/US] [attachment "0310157-009-AC-FINAL - Appendix SS-1 Stack Sampling Facilities.PDF" deleted by James Little/R4/USEPA/US] [attachment "Signed Document - Facility # 0310157-009-AC-FINAL.pdf" deleted by James Little/R4/USEPA/US]

Adams, Patty

From: Harvey, Mary
Sent: Wednesday, April 11, 2007 8:53 AM
To: Adams, Patty
Subject: FW: GERDAU AMERISTEEL - 0310157-009-AC-FINAL

From: Wold, James [mailto:JWold@GerdauAmeriSteel.com]
Sent: Tuesday, April 10, 2007 7:03 AM
To: Harvey, Mary
Subject: RE: GERDAU AMERISTEEL - 0310157-009-AC-FINAL

Documents have been received
Thanks



James P. Wold, CHMM
Environmental Manager
Gerdau Ameristeel
Jacksonville Steel Mill Division
P.O. Box 518
16770 Rebar Rd
Baldwin, FL 32234
Office 904-266-4261 ext 133
Cell 904-228-1962
Fax 904-266-0053

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]
Sent: Monday, April 09, 2007 2:08 PM
To: Mr. Donald R. Shumake, Gerdau Ameristeel; Wold, James; Mr. Richard Robinson, ERMD-EQD; Mr. Scott A. McCann, Golder Associates, Inc.; Mr. David LaRocca, Golder Associates, Inc.
Cc: Mitchell, Bruce; Adams, Patty; Gibson, Victoria
Subject: GERDAU AMERISTEEL - 0310157-009-AC-FINAL

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Thank you,

DEP, Bureau of Air Regulation

AIR CONSTRUCTION PERMIT APPLICATION FOR TEST PRODUCTION OF VEHICLE TIRES AS A CARBON SOURCE FOR STEEL MAKING IN THE ELECTRIC ARC FURNACE (EAF)

Gerdau Ameristeel
Jacksonville Steel Mill

Prepared For:

Gerdau Ameristeel

Prepared By:

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

December 2006
0639766

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

APPLICATION FOR AIR PERMIT – LONG FORM

Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air permit. Also 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
- Where the applicant proposes to establish, revise, or renew a plantwide applicability limit (PAL).

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 & 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: 1/5/07	2. Project Number(s): 0310157-009-AC
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 construction permit to establish, revise, or renew a plantwide applicability limit (PAL).

☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

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

This construction permit application is for a test production run of vehicle tires as a carbon source in Gerdau Ameristeel's Jacksonville Steel Mill electric arc furnace (EAF).

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
001	Electric Arc Furnace	AC1A	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:
   Donald R. Shumake, Vice President/General Manager
2. Owner/Authorized Representative Mailing Address:
   Organization/Firm: **Gerdau Ameristeel**
   Street Address: **16770 Rebar Road**
   City: **Baldwin** State: **Florida** Zip Code: **32234**
3. Owner/Authorized Representative Telephone Numbers:
   Telephone: **(904) 226-4261** ext.**100** Fax: **(904) 266-4244**
4. Owner/Authorized Representative Email Address: **shumake@gerdauameristeel.com**
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.

   Donald R. Shumake — Signature

   1-2-07 — 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:

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:
   Street Address:
   City: State: Zip Code:

4. Application Responsible Official Telephone Numbers:
   Telephone: () ext. Fax: ()

5. Application Responsible Official Email Address:

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.

   Signature Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **Scott A. McCann**
   Registration Number: **54172**
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**
3. Professional Engineer Telephone Numbers...
   Telephone: **(352) 336-5600** ext.**543** Fax: **(352) 336-6603**
4. Professional Engineer Email Address: **smccann@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 12/14/06
Date

(seal) SCOTT A. McCANN LICENSE 54172 STATE OF FLORIDA PROFESSIONAL ENGINEER

* 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: **jwold@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:
2. Facility Primary Responsible Official Mailing Address: Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers: Telephone: () ext. Fax: ()
4. Facility Primary Responsible Official Email Address:

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	B	N
PM	A	N
PM_{10}	A	N
Lead	B	N
SO_2	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: ☒ Previously Submitted, Date: **Dec 04 (PSD)**
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: ☒ Previously Submitted, Date: **Dec 04 (PSD)**
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: ☒ Previously Submitted, Date: **Dec 04 (PSD)**

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, Modification, or Plantwide Applicability Limit (PAL): ☒ Attached, Document ID:**See Part 2**
3. Rule Applicability Analysis: ☒ Attached, Document ID:**See Part 2**
4. List of Exempt Emissions Units (Rule 62-210.300(3), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification: ☐ Attached, Document ID:____ ☒ Not Applicable
6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable
7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(8) 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:____ ☐ 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:
   ☐ 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:
   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

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 [1]
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)

3. Emissions Unit Identification Number: **EU 008**

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

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

   Baghouse No. 5 (Fabric filter – medium temperature)

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: **176 TPH (scrap steel)**	
2. Maximum Production Rate: **160 billet TPH**	
3. Maximum Heat Input Rate: **34.6** 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	**8,520** hours/year
6. Operating Capacity/Schedule Comment:	
Batch operation with a maximum daily average of 160 billet tons steel per hour, Monthly average of 140 billet tons steel per hour 1,192,800 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: **Baghouse No. 5**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Baghouse No. 5 will have one stack.**		
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: **19** feet
8. Exit Temperature: **230°F**	9. Actual Volumetric Flow Rate: **1,000,000** acfm	10. Water Vapor: **5%**
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: **Actual volumetric flow will vary from 750,000 to 1,000,000 acfm as needed to sufficiently evacuate the EAF and Meltshop building.**		

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: **Million cubic feet (MMcf)**	
4. Maximum Hourly Rate: **0.034**	5. Maximum Annual Rate: **289.7**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,019**
10. Segment Comment: **214 cf/ton steel x 160 ton/hr = 0.034 MMcf/hr** **0.034 MMcf/hr x 8,520 hr/yr = 289.7 MMcf/yr**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Scrap Steel and Raw Materials**		
2. Source Classification Code (SCC): **3-03-009-04**	3. SCC Units: **Tons of Raw Material**	
4. Maximum Hourly Rate: **176**	5. Maximum Annual Rate: **1,499,520**	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, carbon, alloys, etc.) to EAF** **Annual rate based on 8,520 hours per year.**		

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
SO_2			NS

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: **15.43** lb/hour **65.7** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0018 gr/dscf** Reference: **Permit**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
0.0018 gr/dscf x (1,000,000 acfm) x 60 min/1 hr x 1 lb/7,000 gr = 15.43 lb/hr
15.43 lb/hr x 8,520 hr/yr x 1 ton/2,000 lb = 65.7 TPY

11. Pollutant Potential/Estimated Fugitive Emissions Comment:
Annual emissions based on 8,520 hours per year.

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: **0.0018 gr/dscf**	4. Equivalent Allowable Emissions: **15.43** lb/hour **65.7** 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: **PM_{10}**	2. Total Percent Efficiency of Control: **99%**
3. Potential Emissions: **15.43** lb/hour **65.7** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0018 gr/dscf** Reference: **Permit**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Pollutant Potential/Estimated Fugitive Emissions Comment: **Annual emissions based on 8,520 hours per year.**	

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: **0.0018 gr/dscf**	4. Equivalent Allowable Emissions: **15.43** lb/hour **65.7** 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: **320** lb/hour **1,193** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **2.0 lb/ton of steel** Reference: **Permit**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **160 ton/hr x 2.0 lb/ton = 320 lb/hr** **1,192,800 ton/yr x 2.0 lb/ton / 2000 lb/ton = 1,193 TPY**	
11. Pollutant Potential/Estimated Fugitive Emissions Comment: **Annual emissions based on 8,520 hours per year.**	

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: **2.0 lb/ton of steel**	4. Equivalent Allowable Emissions: **320** lb/hour **1,193** tons/year
5. Method of Compliance: **EPA Method 10; Three 3-hour test runs.**	
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: **52.8** lb/hour **197** 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**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

160 ton/hr x 0.33 lb/ton = 52.8 lb/hr
1,192,800 ton/yr x 0.33 lb/ton / 2000 lb/ton = 197 TPY

11. Pollutant Potential/Estimated Fugitive Emissions Comment:
Annual emissions based on 8,520 hours per year.

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: **0.33 lb/ton steel**	4. Equivalent Allowable Emissions: **52.8** lb/hour **197** tons/year
5. Method of Compliance: **EPA Method 7E, Three test runs.**	
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: **VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **20.8** lb/hour **77.5** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.13 lb/ton of steel** Reference: **Permit**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

160 ton/hr x 0.13 lb/ton = 20.8 lb/hr
1,192,800 ton/yr x 0.13 lb/ton / 2000 lb/ton= 77.5 TPY

11. Pollutant Potential/Estimated Fugitive Emissions Comment:
Annual emissions based on 8,520 hours per year.

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: **0.13 lb/ton of steel**	4. Equivalent Allowable Emissions: **20.8** lb/hour **77.5** tons/year
5. Method of Compliance: **EPA Method 18, 25, or 25A; Three test runs.**	
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: **Lead (Pb)**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.312** lb/hour **1.163** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.00195 lb/ton steel** Reference: **Permit**	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **160 ton/yr x 0.00195 lb/ton = 0.312 lb/hr** **1,192,800 ton/yr x 0.00195 lb/ton / 2000 lb/ton= 1.163 TPY**	
11. Pollutant Potential/Estimated Fugitive Emissions Comment: **Annual emissions based on 8,520 hours per year.**	

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: **0.312 lb/hr**	4. Equivalent Allowable Emissions: **0.312** lb/hour **1.163** tons/year
5. Method of Compliance: **EPA Method 12; Three test runs.**	
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 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, Permit Requirement**	

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 or Method 9**	
6. Visible Emissions Comment: **Opacity from the exit of the control device. NSPS, 40 CFR 60, Subpart AAa.** **40 CFR 60.273a(c) A continuous monitoring system is not required on modular, multiple-stack, negative pressure, or positive pressure fabric filters if a VE of the control device is performed once per day when the furnace is operating in the melting and refining period.**	

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: ☒ Previously Submitted, Date **Dec 04 (PSD)**

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 **Dec 04 (PSD)**

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 **Dec 04 (PSD)**

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 [1] of [1]
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: ☐ 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

PART 2

1.0 INTRODUCTION

This construction permit application is for a test production run of vehicle tires as a carbon source in Gerdau Ameristeel's Jacksonville Steel Mill electric arc furnace (EAF). Per the Florida Department of Environmental Protection's (FDEP) letter dated January 20, 2006, included as Attachment A, the test production run is proposed to be performed with the new EAF currently being constructed as part of Construction Permit 0310157-007-AC/PSD-FL-349.

2.0 EXISTING FACILITY DESCRIPTION

Gerdau owns and operates a secondary metal production facility, EAF steel mill located in Baldwin, Florida, (Jacksonville Steel Mill). The Jacksonville Steel Mill receives scrap steel by truck and rail and processes it into steel rebar, wire, and rod. The meltshop facility has been operating since 1976.

The new EAF will have a maximum design capacity of 1,192,800 tons of tapped steel per year at 8,520 hours per year. The EAF and Ladle Metallurgy Furnace (LMF) will each have a daily maximum hourly production rate of 160 tons per hour (TPH) and a monthly maximum hourly production rate of 140 TPH.

The facility has supporting activities including scrap delivery from the scrap yard to the furnace and slag processing. A new scrap building authorized as part of Construction Permit 0310157-007-AC/PSD-FL-349 will have a concrete floor and will be constructed south of the new meltshop building. Incoming scrap will be received directly into the new building by both railcar and truck. The scrap will then be loaded into the charge buckets with overhead cranes and transported by a specialized rail car to the meltshop. During the loading of scrap into the charge bucket, carbon in the form of petroleum coke (pet-coke) is layered into the scrap mix. The pet-coke is brought into the facility in "supersac" bags and these are placed into the charge bucket. The rail cars will be routed into the south end of the new meltshop building where a crane will pick up the loaded charge bucket and charge the EAF.

3.0 PROPOSED PROJECT

Several mini-mills in the United States are utilizing discarded tires as a feed stock to the EAF in an effort to reduce and/or replace the conventional use of bituminous coal or pet-coke. Tires offer

several benefits in steel making; steel belts and beads are recycled in the process and the carbonaceous materials are incorporated into the steel bath to assist in the steel making process.

The proposed project will be to unload a semi-truck of shredded or whole tires into a temporary storage location. The tire material will then be loaded by bobcat into the flux bin and then loaded into the charge bucket for use in the EAF. During the temporary process various mixes of tire material and charge carbon will be used. The amount of tires used per heat will be documented during the trial period and submitted with the testing data. The use of tires in the EAF will not increase its capacity. The test will include approximately 40 heats with each heat of a minimum 40 minutes in duration and be completed within 2 weeks.

Tires will supplement and/or replace the current carbon source, pet-coke, in the charge bucket. The carbon and hydrogen in the tires will provide fuel energy while the steel belts and beads will become part of the heat (steel product). Tires typically have an approximate sulfur content of 1.4 percent with a heating value of 15,800 British thermal units per pound (Btu/lb) compared to pet-coke with a typical sulfur content of 3 percent and higher, with a heating value of around 13,200 Btu/lb. It is anticipated that the use of tires versus pet-coke will result in decreased sulfur dioxide (SO_2) emissions from the EAF. Tire use is not expected to result in increases of carbon monoxide (CO), nitrous oxides (NO_x), particulate matter (PM), or volatile organic compounds (VOC) emissions. Several U.S. steel facilities are currently utilizing tires as a carbon source in EAF operations.

3.1 Existing Emission Data

Gerdau Ameristeel has performed tests to establish the affects on EAF emissions from tires used as a substitute for charge carbon at a similar facility and the results are as follows:

Gerdau Ameristeel-Wilton, Iowa, June 6-10, 2005 (5 Tire Test Runs):

- Average PM and PM with a diameter of 10 microns or less (PM_{10}) emissions with tires equal to 5.615 pounds per hour (lb/hr) and 0.0013 grains per dry standard cubic foot (gr/dscf) compared to permit limits of 14.3 lb/hr and 0.0052 gr/dscf;
- Observed Opacity of 0 percent;
- Average NO_x emissions with tires equal to 11.1 lb/hr compared to the permit limit of 45 lb/hr;

- Average SO_2 emissions with tires equal to 1.7 parts per million (ppm) compared to a permit limit of 500 ppm; and
- Average CO emissions equal to 157.8 lb/hr compared to a permit limit of 466 lb/hr.

Gerdau Ameristeel-Wilton, Iowa, January 10-11, 2006:

- No significant difference in CO; 181.2 lb/hr without tires, 174.2 lb/hr with tires.

Summaries of the test results are provided in Attachment B.

3.2 Other Emission Data

EPA published "Pilot-Scale Evaluation of the Potential for Emissions of Hazardous Air Pollutants From Combustion of Tire-Derived Fuel," April 1994, states that "overall, it appears that, with the exception of zinc, potential emissions from tire derived fuel (TDF) combustion are not significantly different from emissions from combustion of conventional fossil fuels, when burned in a well designed and well operated combustion device. If unacceptable particulate loading occurs due to zinc emissions, then the emissions would have to be controlled by an appropriate particulate control device." The report states, "results indicate that, if burned in a steady-state mode, TDF combustion will result in very low emissions of CO, total hydrocarbons (THCs), volatile and semi-volatile organics, and PCDD/PCDF (dioxins/furans). The report abstract is provided as Attachment C. A comparison of the chemical composition of pet-coke versus tires is included as Attachment D.

Based on a comparison of chemical composition of pet-coke and tires, U.S. Environmental Protection Agency's (EPA) experience with combustion of TDF and the physical characteristics of the EAF, no increase in chlorine or dioxins/furans is expected as a result of substituting tires for pet-coke in the EAF.

3.3 Emission Test Schedule and Methods

Gerdau proposes to perform the tire trial following the initial compliance test for the new EAF. Gerdau proposes to use the compliance test results as the baseline to compare the affects of the tire trial.

During the temporary process various mixes of shredded tires and charge carbon will be used. The amount of tires used per heat will be documented during the trial period and submitted with the testing data. The EAF will have the capacity to charge carbon at a rate of 64 lb per ton of steel. The average weight of scrap tire is 20 lb. Based on equal carbon content of pet-coke and tires, an approximate range of up to three scrap tires or more per ton of steel may be added into the steel mix for the test runs. The use of tires in the EAF will not increase its capacity. The test will include 40 heats and be completed within two weeks. To the extent possible, identical grades of steel will be used. The new EAF is scheduled to begin operation April, 2007. Testing would be expected to occur after the initial compliance test following startup.

3.3.1 PM and Metals

EPA Method 5 and 29, referenced in the Code of Federal Regulation, Title 40, Part 60 (40 CFR 60), Appendix A will be employed to measure PM and lead emissions. Three to five test runs will be performed each of sufficient duration to include at least three heat cycles. These test runs will be performed during the heats with the largest amount added tire material. The results of these tests will be representative of the largest potential change in emissions compared to normal operations. As such these tests will be sufficient to compare PM and lead emissions from the EAF with and without tires.

Per FDEP's request to measure chromium (Cr), cadmium (Cd), and mercury (Hg), the following information is provided. A comparison of metal content of pet-coke and tires is provided in Attachment D. As shown in the table the concentration of these metals in pet-coke and tires is not significantly different. Because tires represent a small fraction of the total heat and because the content of Cr, Cd, and Hg, are not significantly different from the existing carbon source, it is proposed that testing not be performed for these metals. There is no reason to believe that emissions of these metals will be significantly different from heats with or without tires.

3.3.2 Gaseous Pollutants

The following pollutants will be measured during all test heats (approximately 40 heats).

3.3.3 NO_x

EPA Method 7E, referenced in 40 CFR 60, Appendix A will be employed to measure NO_x emissions.

3.3.4 SO_2

EPA Method 6C, referenced in the 40 CFR 60, Appendix A will be employed to measure SO_2 emissions.

3.3.5 VOC

EPA Method 18, 25 or 25A, referenced in 40 CFR 60, Appendix A will be employed to measure VOC emissions.

3.3.6 CO

EPA Method 10A, referenced in 40 CFR 60, Appendix A will be employed to measure CO emissions.

3.3.7 Visible Emissions

EPA Method 9 referenced in 40 CFR 60, Appendix A will be employed to measure opacity during each PM emission test run.

4.0 RULE APPLICABILITY

The facility is currently permitted under Title V Permit No. 0310157-006-AV. The facility is not a major source of hazardous air pollutants (HAPs).

Emission Unit 008 is regulated by; NSPS 40 CFR 60 Subpart AAa (EAF only); and Prevention of Significant Deterioration (PSD) Permit 0310157-007-AC/PSD-FL-349.

5.0 PSD REVIEW

No increases in emissions are expected with the substitution of tires as a carbon source during the proposed test runs. In addition, the test runs consist of approximate 40 heats with each heat lasting a minimum of 40 minutes. PSD review is not applicable to the project. If the process is successful, a permanent method will be designed and a minor source air construction permit application will be submitted to add tires as an authorized raw material for the EAF.

ATTACHMENT A

FDEP LETTER REQUESTING AIR CONSTRUCTION PERMIT

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

January 20, 2005

CERTIFIED MAIL - Return Receipt Requested

Mr. James P. Wold
Environmental Manager
Gerdau Ameristeel - Jacksonville Steel Mill
16770 Rebar Road
Baldwin, Florida 32234

Dear Mr. Wold:

RE: Request to Conduct Performance Tests While Using Vehicle Tires as a Carbon Source in the Mill's EAF

The Department received your letter on January 18, 2006, requesting permission to conduct performance tests while using vehicle tires as a carbon source in the mill's EAF. The proposal will require an air construction permit (including a Public Notice) to authorize the proposed trial test. Therefore, complete the appropriate application pages and have it signed by the Authorized Representative and sealed by a Professional Engineer (PE) registered in Florida; and, the PE of Record will be required to oversee the technical aspects of the proposed project and the performance tests. The application should include the following information:

1. Has the new EAF been installed, because the Department would be more interested in the tests being performed on the new unit than the existing one? Please see permit 0310157-007-AC/PSD-FL-349, which was issued on September 21, 2005, authorizing the construction of a new EAF and LMF.
2. Please provide the proposed pollutant testing methods that will be used in the performance tests. For particulate and metals, EPA Method 29 – Determination of Metals Emission from Stationary Sources should be used. However, if both EPA Methods 5 and 29 are proposed, the Department would not object. The metals of concern are lead (Pb), chromium (Cr), cadmium (Cd), and mercury (Hg). For mercury, EPA Method 101A could also be performed.
3. Since chlorine is contained in both bituminous coal and tires and in about the same amounts, what emissions are expected from this component? Has there been any testing conducted at any steel mill for this pollutant or resultant compounds, i.e., dioxin or furans? If so, please provide such documentation.
4. Regarding a potential modification and PSD concerns, what emissions data will be used for baseline emissions for comparative purposes? There didn't appear to be any proposed in the request. In addition and for comparative purposes, it is very important that the production throughput be equivalent for both the baseline tests and the tire substitution tests.
5. In the second paragraph on your letter, it was mentioned that there are several mini-mills already using tires in their processes and that summary data from emissions testing is available. Please provide us with that data, for it might be useful in establishing a testing protocol for your mill.
6. How many tests are you planning to perform and when are these tests to be conducted? Please be definitive in your response, as your request covers a two-week time period.

If you have any questions regarding this matter, please contact Mr. Bruce Mitchell at 904/413-9198 or write to me at the above letterhead address.

Sincerely,

Jeffery F. Koerner, P.E.
Permitting North Administrator
Bureau of Air Regulation

TLV/bm

cc: Richard Robinson, ERMD-EQD

GERDAU AMERISTEEL

Ms. Trina L. Vielhauer,
Chief, Bureau of Air Regulations
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

October 17, 2006

RE: Request for Test Production Run – Tires as Carbon Source in EAF

Gerdau Ameristeel is requesting temporary approval to test the use of vehicle tires as a carbon source for the Jacksonville Steel Mill electric arc furnace (EAF). If this test is successful, a permanent procedure will be developed to facilitate the use of tires as a carbon source and submit an application for your approval.

Several mini-mills in the United States are utilizing discarded tires as a feed stock to the electric arc furnace (EAF) in an effort to reduce and/or replace the conventional use of bituminous coal or petroleum coke (pet-coke). In addition to the steel belts and beads, the carbonaceous materials are incorporated into the steel bath to assist in the steel making process. Summary data from emission testing suggests that the use of tires may actually reduce SO_2 emissions from the EAF. Tire use is not expected to result in significant changes in emissions of NO_x, PM, or VOC.

The proposed process will be to unload a semi-truck of shredded tires into a temporary storage location. The shredded tires will then be loaded by bobcat into the flux bin and then loaded into the charge bucket for use in the EAF. During the temporary process various mixes of shredded tires and charge carbon will be used. The amount of tires used per heat will be documented during the trial period and submitted with the testing data. The use of tires in the EAF will not increase its' capacity. The test will include 40 heats and be completed within two weeks.

During these proposed test runs, performance tests will be performed to determine the EAF gaseous emissions. The stack tests will be performed for SO_2, NO_x, CO, and VOC. If the process is successful, we will design a permanent method and submit that modification request to our air permit for your approval.

Jacksonville Steel Mill · 16770 Rebar Road · P. O. Box 518 · Baldwin, FL 32234 · (904) 266-4261 Fax (904) 266-4244

GERDAU AMERISTEEL

Please let us know at your earliest convenience your position on this trial test over a two week period. Ideally, we would appreciate if we could have your approval by the middle of February then our test would be conducted in late February or early March.

If you have any questions, please do not hesitate to call.

Thank you,

James P. Wold
Environmental Manager
Jacksonville Steel Mill
904-266-4261 x133

cc: Richard L. Robinson, P.E., Manager Air Pollution Source Permitting Section
Donald R. Shumake, Vice President/General Manager
David Larocca, Project Engineer

ATTACHMENT B

GERDAU AMERISTEEL – WILTON TEST DATA

Eagle Mountain Scientific, Inc.

Eagle Mountain Scientific Inc.

Results of the Carbon Monoxide Testing Gerdau AmeriSteel Iowa Wilton Factory EAF Baghouse Permit #:03-TV-006

Prepared for:

Mr. Jack Skelley
North Star Steel
PO Box 3002
Wilton, Iowa 52778

Report # 902284
January 10-11, 2006

Prepared By:

Brian Durkop

Brian Durkop
Manager

820-COMMONWEALTH DR •WARRENDALE • PENNSYLVANIA • 15086
PHONE: 724.742.2060 • FAX: 724.742.2066
8905 AUTUMN OAKS DRIVE • SUITE 2 • ROCKFORD • MINNESOTA • 55373
PHONE: 763.477.4462 • FAX: 763.477.5991

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SECTION 1.0

EXECUTIVE SUMMARY

This report presents the results of a source test performed by Eagle Mountain Scientific, Inc. (EMSI) at the Gerdau Ameristeel facility located in Wilton, Iowa. The tests were performed on January 10-11, 2006 to quantify Carbon Monoxide emissions from the baghouse. The purpose of the test was to add used tires to the process as a source of carbon. The goal was to meet the requirements set forth in the Permit to Operate (03-TV-006) while using used tires in the process. EMSI conducted U. S. EPA (EPA) and Iowa Department of Natural Resources (Iowa DNR) approved testing methods. This report describes the procedures used to complete the testing and the results of these tests.

The testing was performed by Mr. Mark Carlson and Mr. Nate Traut. The process operating conditions were recorded by Gerdau Ameristeel plant personnel.

1.1 Summary of Test Methods

Table 1.1
Gerdau Ameristeel
EAF Baghouse
January 10-11, 2006

METHOD	PURPOSE	RUN TIME	# OF RUNS
EPA 1	Determination of Traverse Points	NA	1
EPA 2	Determination of Velocity and Volumetric Flow	30 minutes	3
EPA 3	Determination of Molecular Weight	30 minutes	3
EPA 4	Determination of Moisture	30 minutes	3
EPA 10	Determination of Carbon Monoxide	~90 minutes	3

1.2 Summary of Test Results

Table 1.2
Gerdau Ameristeel
EAF Baghouse
Without Tires
January 10-11, 2006

POLLUTANT	RUN 1	RUN 2	RUN 3	RUN 4	AVERAGE	LIMIT
Carbon Monoxide Without Tires (lb/hr)	198.3	166.7	178.6	-	181.2	466.0
Carbon Monoxide With Tires (lb/hr)	147.8	181.5	198.0	169.5	174.2	466.0

1.3 Summary of Production

Table 1.4
Gerdau Ameristeel
EAF Baghouse
Carbon Monoxide
Without Tires
January 10-11, 2006

PARAMETER	RUN 1	RUN 2	RUN 3	Average
Heat Number	21525	21528	21539	-
Operation Time (min)	87.5	98.3	94.1	93.3
Production (tons/hr)	41.6	48.7	52.5	47.6
Total Scrap Charge Weight (lbs)	173,700	169,700	173,900	172,433
Kilowatt Hour (per ton)	416	405.5	407.2	409.6
Natural Gas (scfm)	19,400	17,900	17,600	18,000

Table 1.4
Gerdau Ameristeel
EAF Baghouse
Carbon Monoxide
With Tires
January 11, 2006

PARAMETER	RUN 1	RUN 2	RUN 3	RUN 4
Heat Number	21541	21543	21544	21545
Operation Time (min)	97.7	99.9	98.3	94.7
Production (tons/hr)	32.7	41.6	36.0	44.2
Number Tires 1st Charge	55	51	52	55
Number Tires 2nd Charge	30	34*	33	30
Tire Weight	1,700	1,700	1,700	1,700
Total Scrap Charge Weight (lbs)	174,900	177,900	174,800	164,800
Kilowatt Hour (per ton)	429.3	400.5	448.5	422.9
Natural Gas (scfm)	14,000	17,900	18,000	18,100

* added in 3rd Charge

1.4 Summary of Report Organization

This report is organized in the following manner. Section 2.0 provides detailed test results for the individual test runs. Section 3.0 provides a summary of the testing procedures.

The following information is located in appendices A through E, respectfully: copies of the field data sheets, calculated field data results, process operations data, equipment calibrations, and the test plan.

Eagle Mountain Scientific, Inc.

Eagle Mountain Scientific Inc.

Results of the Compliance Testing Gerdau Ameristeel Iowa Wilton Generating Plant EAF Baghouse

Permit #:03-TV-006

Prepared for:

Mr. Jack Skelley
Gerdau Ameristeel Iowa
PO Box 3002
Wilton, Iowa 52778

Report # 902240
June 6-10, 2005

Prepared By:

Brian Durkop

Brian Durkop
Manager

820-COMMONWEALTH DR • WARRENDALE • PENNSYLVANIA • 15086
PHONE: 724.742.2060 • FAX: 724.742.2066
8905 AUTUMN OAKS DRIVE • SUITE 2 • ROCKFORD • MINNESOTA • 55373
PHONE: 763.477.4462 • FAX: 763.477.5991

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SECTION 1.0

EXECUTIVE SUMMARY

This report presents the results of a source test performed by Eagle Mountain Scientific, Inc. (EMSI) at the Gerdau Ameristeel facility located in Wilton, Iowa. The tests were performed on June 6-7 and 9-10, 2005 to quantify particulate matter, gaseous emissions and visible emissions from the baghouse. The purpose of the test was to add used tires to the process as a source of carbon. Testing was conducted over a 4-day period, and various number of tires were added during each heat. The goal was to meet the requirements set forth in the Permit to Operate (03-TV-006) while using used tires in the process. EMSI conducted U. S. EPA (EPA) and Iowa Department of Natural Resources (Iowa DNR) approved testing methods. This report describes the procedures used to complete the testing and the results of these tests.

The testing was performed by Mr. James Wilson, Mr. Mark Carlson, and Mr. Denny Winkle. The process operating conditions were recorded by Gerdau Ameristeel plant personnel.

1.1 Summary of Test Methods

Table 1.1
Gerdau Ameristeel
EAF Baghouse
June 6-10, 2005

METHOD	PURPOSE	RUN TIME	# OF RUNS
EPA 1	Determination of Traverse Points	NA	1
EPA 2	Determination of Velocity and Volumetric Flow	240 minutes	3
EPA 3	Determination of Molecular Weight	240 minutes	3
EPA 4	Determination of Moisture	240 minutes	3
EPA 5	Determination of Particulate Matter	240 minutes	3
EPA 6C	Determination of Sulfur Dioxide	60 minutes	3
EPA 7E	Determination of Nitrogen Oxides	60 minutes	3
EPA 9	Determination of Opacity	60 minutes	1
EPA 10	Determination of Carbon Monoxide	60 minutes	3
EPA 202	Determination of Condensable Particulate Matter	NA	3

1.2 Summary of Test Results

Table 1.2
Gerdau Ameristeel
EAF Baghouse
June 6-10, 2005

POLLUTANT	RUN 1	RUN 2	RUN 3	RUN 4	RUN 5	AVERAGE	LIMIT
Total Particulate (lb/hr)	6.943	7.960	3.878	3.379	5.917	5.615	14.3
Total Particulate (gr/dscf)	0.0017	0.0019	0.0009	0.0008	0.0014	0.0013	0.0052
PM-10 (lb/hr)	6.943	7.960	3.878	3.379	5.917	5.615	11.97
Nitrogen Oxide (lb/hr)	10.9	12.0	10.3	11.9	10.2	11.1	45.0
Sulfer Dioxide (lb/hr)	3.6	7.7	4.6	10.8	12.5	7.7	70.2
Sulfer Dioxide (ppm)	0.8	1.6	1.0	2.3	2.6	1.7	500.0
Carbon Monoxide (lb/hr)	112.8	174.95	87.3	203.2	210.6	157.8	466.0
Opacity (%)	0	0	0	0	0	0	40

ATTACHMENT C

EPA PILOT SCALE EVALUATION OF THE POTENTIAL FOR EMISSIONS OF HAZARDOUS AIR POLLUTANTS FROM COMBUSTION OF TIRE-DERIVED FUEL

United States
Environmental Protection
Agency

Control Technology Center

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EPA REVIEW NOTICE

The research described in this article has been reviewed by the Air and Energy Engineering Research Laboratory, U.S. Environmental Protection Agency, and approved for publication. The contents of this article should not be construed to represent Agency policy nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

Pilot-Scale Evaluation of the Potential for Emissions of Hazardous Air Pollutants from Combustion of Tire-Derived Fuel

Prepared by:

Paul M. Lemieux
U.S. Environmental Protection Agency
Air and Energy Engineering Research Laboratory
Research Triangle Park, NC 27711

Prepared for:

U.S. Environmental Protection Agency
Office of Research and Development
Washington, DC 20460

ABSTRACT

Experiments were conducted in a 73 kW (250,000 Btu/hr) rotary kiln incinerator simulator to examine and characterize emissions from incineration of scrap tire material. The purposes of this project are to: (1) generate a profile of target analytes for full-scale stack sampling efforts, not to generate statistically defensible emission factors for the controlled combustion of scrap tire material; and, (2) where possible, give insight into the technical issues and fundamental phenomena related to controlled combustion of scrap tires. Wire-free crumb rubber sized to < 0.64 cm (< 1/4 in) was combusted at two different feed rates, two different temperatures, and at three different kiln oxygen concentrations. Along with continuous emissions monitoring for oxygen (O_2), carbon dioxide (CO_2), carbon monoxide (CO), nitric oxide (NO), sulfur dioxide (SO_2), and total hydrocarbons (THCs), samples were taken to examine volatile and semi-volatile organics, polychlorinated p-dibenzodioxins and dibenzofurans (PCDD/PCDF), and metal aerosols. In addition, a continuous polycyclic aromatic hydrocarbon (PAH) analyzer was used in all the tests. Samples were analyzed with an emphasis on the 189 hazardous air pollutants (HAPs) listed in the 1990 Clean Air Act Amendments (CAAA), but other compounds were also identified where possible.

Results indicate that, if burned in a steady-state mode, TDF combustion will result in very low emissions of CO, THCs, volatile and semi-volatile organics, and PCDD/ PCDF. Metal emissions were also very low, with the exception of arsenic (As), lead (Pb), and zinc (Zn). Uncontrolled stack concentrations of As and Pb were 37.16 and 65.96 $\mu g/Nm^3$, respectively. Uncontrolled Zn emissions were considerably higher, at 35,465 $\mu g/Nm^3$. Results also indicate that organic emissions can increase significantly when TDF is fired in a non-steady mode. The continuous PAH analyzer appeared to track transient operation well, and gave concentration results in the same range as those derived using EPA standard semi-volatile organic sampling methodologies.

Overall, it appears that, with the exception of zinc, potential emissions from TDF combustion are not significantly different from emissions from combustion of conventional fossil fuels, when burned in a well-designed and well-operated combustion device. If unacceptable particulate loading occurs due to zinc emissions, then the emissions would have to be controlled by an appropriate particulate control device.

ATTACHMENT D

PET-COKE AND TIRE TYPICAL ANALYSIS

ATTACHMENT D

PET-COKE AND TIRE TYPICAL ANALYSIS

TYPICAL ULTIMATE ANALYSIS

Parameter	Eastern Bituminous Coal	Pet-Coke	Tires
Carbon %	80.64	79	77.9
Hydrogen %	4.5	3.3	7.4
Oxygen %	2.4	0.08	2.245
Nitrogen %	1.1	1.6	0.24
Sulfur %	1.75	3.5 – 7.0	1.34
Chlorine %	0.11	0.02	0.14
Ash %	10.0	0.5 – 1.5	9.9
Moisture %	7.5	3.5 - 12	0.8
Heating Value (HHV) btu/lb	12,500	13,700	15,800
Cadmium	0.09 ppm[a]	0.09 ppm[c]	<5 ppm
Chromium	15 ppm[a]	15 ppm[c]	<5 ppm
Mercury	1.29E-12 lb/Btu[a]	0.0009 – 0.5 ppm[b]	0.006 – 0.33 ppm[b]

[a] USGS COALQUAL Database Trace Elements for the Central Appalachian Region http://energy.er.usgs.gov/coalqual.htm

[b] EPA– Mercury Content and Selected Fuel Properties of As-Fired Coals and Supplemental Fuels Burned in Coal-fired Electric Utility Boilers Nationwide in 1999.

[c] Assumed to be equal to coal.