Title V Air Operation Permit Renewal
Permit No. 0310157-013-AV

APPLICANT

The applicant for this project is Gerdau Ameristeel, Jacksonville Steel Mill. The applicant's responsible official and mailing address are: Mr. James P. Wold, Environmental Manager, Gerdau Ameristeel, Jacksonville Steel Mill, 16770 Rebar Road, Jacksonville Fl., 32234.

FACILITY DESCRIPTION

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

On September 21, 2005, the Department issued Permit No. 0310157-007-AC/PSD-FL-349 to Gerdau Ameristeel for the construction of a new melt shop, EAF, LMF and continuous caster machine and New No. 5 Baghouse Control System.

On May 5, 2006, the Department issued Permit No. 0310157-008-AC/PSD-FL-349A, which modified Permit No. 0310157-007-AC/PSD-FL-349 to include a new gas fired BRF #2 and a modification to the existing BRF #1.

On April 6, 2007 the Department issued Permit No. 0310157-009-AC/PSD-FL-349B, which modified Permit No. 0310157-007-AC/PSD-FL-349 to include tire as a source of carbon to the EAF.

Completed Construction authorized by Permit No. 0310157-009-AC/PSD-FL-349B

In November 2006, the New No. 5 Baghouse control system construction was completed

In May 2007, the new melt shop building was completed

In May 2007, the EAF construction was completed

On July 28, 2008 Gerdau Ameristeel requested an extension of Air Permit No. 0310157-009-AC/PSD-Fl-349B. On October 09, 2008, the Department issued Permit No. 0310157-011-AC/PSD-FL-349C which extended the expiration date of Air Permit No. 0310157-009-AC/PSD-Fl-349B from September 28, 2008 to October 01, 2010. This extension provided the facility the necessary time to finish the construction of the new LMF, the new continuous caster machine, the new gas-fired billet reheat furnace #2 , modification of the existing billet reheat furnace #1 and associated work; and the complete shakedown of installed equipment, testing and the submittal of a timely TV permit revision application.

Air Permit No. 0310157-011-AC/PSD-FL-349C expired without the construction of the natural-gas fired Rebar Billet reheat furnace (EU 009), the Continuous Caster, LMF & Caster Operation (EU 010). and the Wire /Rod Mill billet reheat furnace (EU 011). As such these Emissions Units are considered inactive.

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

PROJECT DESCRIPTION

The purpose of this permit is to renew Title V Air Operation Permit No. 0310157-012-AV for the continued operation of the existing Gerdau Jacksonville Steel Mill.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Renewal received January 16, 2014
Electronic mail correspondence from Mr. James Wold, Gerdau Ameristeel, dated February 07, 2014
Notice of Intent to Issue Air Permit issued February 18, 2014
Public Notice Published xx/xx/2014

PRIMARY REGULATORY REQUIREMENTS

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

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C. The facility belongs to one of the 28 major facility categories.

NSPS: The facility does operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

Internal Combustion Engines, EU 012 ,EU 013 and EU 014 are subject to the requirements of 40 CFR part 60 subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR 60, Subpart A, General Provisions These diesel engines are classified as new, stationary compression ignition (CI) internal combustion engine (ICE) and are required to comply with the requirements of requirements of 40 CFR 60 Subpart IIII.

The Melt Shop, Electric Arc Furnace, Continuous Caster, Ladle Metallurgy Furnace (EU 008) is Subject to 40 CFR 60, Subpart AAa, Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels, and 40 CFR 60, Subpart A, General Provisions.

NESHAP: The facility does operate emissions units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

The Melt Shop, Electric Arc Furnace, Continuous Caster, Ladle Metallurgy Furnace (EU 008) is subject to 40 CFR 63, Subpart YYYYY, National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities, and 40 CFR 63, Subpart A, General Provisions, as delineated in Table 1 to Subpart YYYYY.

The Scrap Pollution Prevention Plan for the control of contaminants from scrap as required by the Subpart was received by the Florida Department of Environmental Protection on June 27, 2008. (Note: Compliance with requirements listed under Emission Unit No. 008 satisfies the requirements of 40 CFR 63.10686.

Internal Combustion Engines, EU 012 and EU 013 are classified as new stationary RICE by 40 CFR 63.6590(a)(2)(iii) of Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion manufactured after June 12, 2006 with an engine displacement of less than 30 liters per cylinder located at an area source of HAP emissions. In accordance with 40 CFR 63.6590(c)(1) these engines must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines .

Internal Combustion Engine, EU 014 is classified as new stationary RICE by 40 CFR 63.6590(a)(2)(iii) of Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion manufactured after June 12, 2006 with an engine displacement of greater than 30 liters per cylinder located at an area source of HAP emissions. In accordance with 40 CFR 63.6590(c)(1) this engine must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Internal Combustion Engines, EU 015 and EU 016 & EU 017 are classified as existing emergency stationary compression ignition (CI) reciprocating internal combustion engines (RICE) by 40 CFR 63.6590(a)(1)(iii) of Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion manufactured before June 12, 2006 that are located at an area source of HAP emissions. A Stationary RICE is existing if it commenced construction or reconstruction before June 12, 2006.

CAIR: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) applies to Emissions Unit No. 008 at this facility

EU 008 is subject to CAM for the regulated emissions of Particulate Matter (PM). Which are controlled by the No. 5 Baghouse.

Indicator No. 1: Baghouse Total Differential Pressure: Differential pressure was selected as the performance indicator for CAM because it is a good indicator of proper operation and maintenance of the baghouse. When the baghouse is operating properly, total differential pressure will generally be between 3 and 16 inches of water; differential pressure readings of lesser or greater magnitude could indicate impaired baghouse performance and an associated increase in particulate matter emissions from the baghouse outlet. The differential pressure reading will be recorded at least 2 times per 24 hour period manually or continuously via computer data logging system.

Indicator No.2: Stack Located Broken Bag Detection Amp Meters: : Acceptable baghouse operating range should be 0 - 100 pico amps, The measurement principal of broken bag detectors is based on measuring small changes in electrical charge of an energized probe placed in the baghouse exhaust stack. Particles emitted through the baghouse in levels greater than that defined as normal operation is an indication of increased PM emissions. The broken bag detection amps will be recorded at least 2 times per 24 hour period via electronic data logger and included in the Routine Equipment Care - Inspection Route data log.

GHG: Based on the Greenhouse Gases Emissions Report for year 2012, the facility total CO_2e emissions (excluding biogenic CO_2) were 76927.8 metric tons. If the facility's potential to emit GHG is greater than 100,000 TPY of CO_2e emissions, then the facility is classified as a major source of Greenhouse Gases based on EPA's 2010 Gas Tailoring Rule.

PROJECT REVIEW

Below is a brief description of any changes that were made as part of this renewal

2. Update of the Appendices to reflect the current Title V permit format (Appendix TV-6 is replaced with Appendix TV- Title V General Conditions, Appendices RR- Facility-wide Reporting Requirements, TR- Facility-wide Testing Requirements have been added);

3. Revision to the Annual Operation Report, Annual Emissions Fee Form and Fee Facility-Wide Conditions to reflect the changes to the statutes that went into effect for this year,

4. Revision of the Prevention of Accidental Releases Facility-wide condition to reflect the correct reporting agency,

5. Added EU Numbers and permit subsections for the Emergency Engines located at the facility that are subject to Subparts 40 CFR 63, Subpart ZZZZ, and 40 CFR 60, Subpart IIII:

   Subsection D EUs 012 & EU 013 - New Emergency Stationary CI IC Engines
   Subsection E . EU 014 - New Emergency Stationary CI IC Engines Pre 2007
   Subsection F EUs 015 – EU 017 Existing Emergency Stationary CI IC Engines

TITLE V PERMIT FORMAT CHANGES:

- Appendix TV-6 is replaced with Appendix TV- Title V General Conditions
- Appendix RR- Facility-wide Reporting Requirements is added
- Appendix TR- Facility-wide Testing Requirements is added
- Appendix NESHAP, 40 CFR 63 Subpart ZZZZ is added
- Appendix NSPS, 40 CFR 60 Subpart IIIII is added

- Appendix NESHAP, 40 CFR 63 Subpart A – General Provisions is added
- Appendix NSPS, Subpart A – General Provisions is added
- The Annual Operation Report and Annual Emissions Fee Form and Fee Facility-Wide conditions are replaced as follows:

FW1. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013); and Rule 2.301, JEPB; Rule 2.501, JEPB]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

- The Prevention of Accidental Releases (Section 112(r) of CAA) Facility-Wide Condition is replaced as follows:

FW11. Prevention of Accidental Releases (Section 112(r) of CAA). If, and when, the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk

Management Plans, original submittals, revisions or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: https://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: http://www.epa.gov/osweroe1/content/rmp/index.htm. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

CONCLUSION

This project renews Title V air operation permit No. 0310157-012-AV., The applicable standards in Subparts 40 CFR 63, Subpart ZZZZ, and 40 CFR 60, Subpart IIII are also incorporated into the Title V Operation Permit through this renewal project. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C.