# GERDAU AMERISTEEL

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

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

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

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

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

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

- 1. A specification for scrap that addresses contaminants identified by EPA
- 2. Procedures for verifying compliance with the specification
- 3. Procedures for taking corrective action against vendors who do not comply with the specification
- 4. Program policies, implementation elements, and training and outreach materials sufficient to demonstrate how Gerdau Ameristeel, Jackson Tennessee Steel Mill will appropriately implement its responsibilities under the EPA-approved

National Vehicle Mercury Switch Recovery Program (NVMSRP) or other EPAapproved program.

This PPP must be approved by USEPA or a delegated authority. Any deficiencies identified by the permitting authority must be addressed within 60 days of disapproval of the PPP. A copy of the plan and supportive documentation must remain onsite for a period of three years.

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

### I. General Scrap Specifications:

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

- A. Scrap materials must be depleted to the extent practicable of undrained used oil filters, chlorinated plastics, and free organic liquids at the time of charging to the furnace.
- B. Lead-containing components of scrap, such as batteries, battery cables, and wheel weights, must be removed, to the extent practicable, prior to charging in the furnace unless the scrap is used to produce leaded steel.
- C. Scrap must be purchased from providers that have minimized the presence of mercury in scrap through participation in the NVMSRP or another EPA-approved program.

## II. Verification of Compliance with Specifications

- A. Free Organic Liquids, Chlorinated Plastics, Lead and Lead-Containing Components:
  - 1. <u>Visual Inspection</u>: Gerdau Ameristeel, Jackson Tennessee Steel Mill facility conducts a visual inspection of incoming scrap loads to ensure that the scrap meets existing quality and/or purchase order specifications for grade, type, density, and content. Scrap inspection will be required also to determine whether there is an obvious presence of free organic liquids, chlorinated plastics, or lead-containing components. Records of scrap inspections will be maintained on site for one year. Scrap inspection records shall include the identity of the scrap provider for any load that fails visual inspection. Foreign materials will be removed to the extent practicable prior to charging to the furnace, and the scrap supplier will be subject to corrective action.
  - 2. <u>Inspection for Free Organic Liquids</u>: Turnings, borings, and other forms of scrap that were generated as a result of the processing of metal with use of cutting, lubricating or cooling fluids will be visually inspected prior to charging to the furnace to ensure that such scrap does not contain free organic liquids.
  - 3. <u>Depletion of Lead and Chlorinated Plastics from Shredded Scrap</u>: Scrap that has been processed through a shredder that utilizes magnetic or density separation techniques to separate ferrous and non ferrous materials will be presumed to be depleted scrap of chlorinated plastics and lead to the extent practicable.
  - 4. <u>Inspections</u>: Gerdau Ameristeel, Jackson Tennessee Steel Mill shall identify any scrap provider whose scrap (except as described in Paragraph

- 5 below) is not subject to inspection pursuant to this plan. Gerdau Ameristeel, Jackson Tennessee Steel Mill shall audit or inspect the facilities from which such uninspected scrap is provided on a periodic basis at a rate of not less than 10-25% of such facilities each year.
- 5. <u>Unrestricted Scrap</u>: Certain types of scrap, including "factory bundles," "demolition debris," "home scrap," "return scrap", "rail," and "flashings," as defined by common industry practice, as well as similar uncontaminated scrap, are not expected to contain free organic liquids, chlorinated plastics, or lead and will be presumed to be free of these contaminants. This scrap is not subject to the inspection and verification requirements of this plan.
- 6. <u>Baghouse Bags, Internal Process and Maintenance Materials</u>: Baghouse bags and baghouse maintenance materials that are routinely recycled by charging to the electric arc furnace, including personal protective equipment (PPE) and baghouse dust, are exempt from this PPP and not subject to the inspection and verification requirements of this plan.

# B. Mercury

- 1. Gerdau Ameristeel, Jackson Tennessee Steel Mill shall ensure that motor vehicle scrap providers are participating in the National Vehicle Switch Recovery Program (NVMSRP) by conducting a review of the End of Life Vehicle Solutions (ELVS) database to confirm that the motor vehicle scrap provider is enlisted as a participating member. Gerdau Ameristeel, Jackson Tennessee Steel Mill will conduct a semi-annual review of the ELVS database to determine whether the provider remains identified as an NVMSRP participant;
  - a. Gerdau Ameristeel, Jackson Tennessee Steel Mill may not be able to confirm that some motor vehicle scrap providers such as Brokers are enlisted as a participating member in the NVMSRP through the ELVS database. In these cases Gerdau Ameristeel, Jackson Tennessee Steel Mill will confirm that the broker is participating in the NVMSRP or another EPA-approved program by obtaining from the broker written assurance that any motor vehicle scrap provided by such broker to Gerdau Ameristeel, Jackson Tennessee Steel Mill was procured from other suppliers who are signed up for and are participating in the NVMSRP or another EPA-approved program;
  - b. Gerdau Ameristeel, Jackson Tennessee Steel Mill will require motor vehicle scrap brokers to confirm such written assurance on a semi-annual basis.
- 2. Gerdau Ameristeel, Jackson Tennessee Steel Mill will conduct a semiannual review the ELVS database to corroborate that the participant is

implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles by turning in mercury switches.

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

### III. Corrective Action

### A. Lead, Chlorinated Plastics, Free Organic Liquids

- 1. If, during inspection of scrap pursuant to Part II(A) above, Gerdau Ameristeel, Jackson Tennessee Steel Mill determines that the scrap provider has not met the specifications in part I, the scrap provider will be subject to corrective action.
  - a. A nonconforming scrap load will be rejected unless contaminants causing the failure can be removed to the extent practicable. The vendor may ship Unrestricted Scrap so long as it adheres to the provisions outlined in Part II(a)(5).
  - b. After a failure to meet the scrap specifications in Part I, the scrap provider must sign a statement acknowledging the requirements of the scrap specifications and provide either certification or another comparable form of reasonable assurance that the scrap specifications will be met in the future.

c. If the vendor continues to fail to meet the scrap specifications, Gerdau Ameristeel, Jackson Tennessee Steel Mill will consult with the scrap provider on the cause or reasons why the scrap loads are nonconforming and will inform the scrap provider that it may be suspended for a period of 30 days if the problem is not resolved.

### B. Mercury

- 1. If, Gerdau Ameristeel, Jackson Tennessee Steel Mill reasonably believes, either as a result of inspection, site visits to a scrap yard, or review of the ELVS database or by other means, that a scrap supplier is not taking appropriate steps to minimize the presence of mercury switches in scrap from end-of-life vehicles, the facility shall:
  - a. Issue a letter to the scrap provider reiterating the requirements of the NVMSRP or another EPA-approved program and threatening suspension if the scrap provider fails to fulfill its responsibilities under the NVMSRP or another EPA-approved program.
  - b. Suspend the scrap provider if, within six months of receipt of the letter described above, the scrap provider again fails to show that it is aware of the need for and is implementing appropriate steps to minimize the presence of mercury switches in auto shred. The suspension shall only apply to shipments of motor vehicle scrap by The provider will then have to re-qualify by demonstrating that it has cured the defect that caused the failure to meet the scrap specification.
  - c. For purposes of Section III A and B, if the nonconforming scrap is purchased through a broker, Gerdau Ameristeel, Jackson Tennessee Steel Mill will require the broker to provide written assurances that the broker implemented corrective action as set forth in Section III of this plan with respect to the supplier of such non-conforming scrap.

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

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