

Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Colleen M. Castille Secretary

January 21, 2004

CERTIFIED MAIL - Return Receipt Requested

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

RE: Request to Replace the Existing Electric Arc Furnace with Two New Ones and Increase Production of the Melt Shop Operation and the Billet Reheat Furnace Operation Project No.: 0310157-007-AC/PSD-FL-349

Dear Mr. Shumake:

On December 23, 2004, the Department received a response to RAIs (Request for Additional Information) that were sent on November 24 and December 14, 2004. Based on our review of the response, we have determined that the following additional information is needed in order to continue processing this application package. Please provide all assumptions, calculations, and reference material(s), that are used or reflected in any of your responses to the following issues:

- 1. Regarding Table 5-12. Cost Effectiveness of SCR, Billet Reheat Furnace.
- a. Provide the detailed vendor quote from CSM Industries (2002), including the catalyst cost, as listed under the headers "DIRECT CAPITAL COSTS (DCC), SCR Basic Process" and referred to in Footnote "b". Please provide a more updated vendor quote, preferably from some timeframe in late 2004.
- b. Provide the detailed CSM Industries catalyst quote" as listed under the headers "DIRECT OPERATING COSTS (DOC), (6) Catalyst Replacement and disposal" and referred to in Footnote "d".
- c. Show documentation where you got the "removal efficiency of "30 percent", as listed under the header "MAXIMUM NOx EMISSIONS (TPY)".
- d. Show documentation where you got the information to state that the "proven achievable control rate" is essentially "10%", as referred to under the header "MAXIMUM NOx EMISSIONS (TPY):". In addition, why did you claim that the "projected achievable control rate" is three (3) times (30%) the "proven achievable control rate"? e. What removal efficiency did the vendor claim that can be achieved? Please provide this document.
- 2. In the EPA article provided titled "EPA's Air Pollution Control Technology Fact Sheet: Paper/Nonwoven Filter", EPA-452/F-03-023, there is a reference made regarding "condensables" as it relates to particulate matter (PM) in the flue gas stream. In the original application. I did not see any reference of "condensable" when addressing both PM and lead (Pb; includes Pb compounds). Does the proposed BACT limit for PM of 0.0018 gr/dscf include both filterable PM and condensable PM? If not, then how much potential condensable PM and total PM is expected/projected from the proposed new EAF and Melt Shop Operations? Since it appears that a precedent has been established for BACT for limiting "total PM" from a new EAF and Melt Shop Operation by Indiana's Department of Environmental Management in a PSD permit for Steel Dynamics, Inc., then please submit a BACT determination for the "total PM", which includes both filterable PM and condensable PM. Also, submit a BACT determination for the "total Pb", which includes both filterable Pb and condensable Pb and should be in the terms of "gr/dscf".

"More Protection, Less Process"

Mr. Donald R. Shumake Gerdau Ameristeel Jacksonville Steel Mill Air Construction Permit Project No.: 0310157-007-AC/PSD-FL-349 Page 2 of 2

- 3. For purposes of reducing Pb emissions from the proposed new EAF and Melt Shop Operations, please submit at least two separate bids from different companies for the installation of a HEPA Filter System that would be placed in series and after the associated baghouse systems.
- 4. What is the percentage, by weight, of the filterable Pb (including lead compounds) in the existing baghouse dust?
- 5. How much of the "condensable PM" is Pb (including lead compounds), by weight, from the existing EAF and Melt Shop Operations? What is the potential-to-emit from the proposed new EAF and Melt Shop Operations for "condensable Pb, including Pb compounds" in terms of gr/dscf, lbs/hr, and TPY?
- 6. In Comment 15 of the RAI, it was noted that St. John's River Power Park was an SO₂ increment-consuming source with emissions of 1858 grams per second, and that these emissions were not included in the PSD increment analyses included with the original permit application submittal. A remodeled PSD Class II SO₂ analysis was included with this submittal; however, the PSD Class I SO₂ analysis within 50 km of the facility was not included. Please provide this information.

The Department will resume processing this application after receipt of the requested information. If you have any questions regarding this matter, please call Bruce Mitchell or Cleve Holladay at (850)413-9198 or (851)921-9896, respectively.

Sincerely

Tina L. Vielhauer

' Chief

Bureau of Air Regulation

TLV/bm

cc: Gregg Worley, U.S. EPA, Region 4 John Bunyak, NPS Chris Kirts, NED Kennard F. Kosky, P.E., GAI

PLACE STICKER AT TOP OF ENVELOPE TO THE RICHT OF RETURN ADDRESS.

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Signature X
1. Article Addressed to: No. Donald R. Shumake Vice President/General Mana Gerdau Ameristeel Jacksonville Steel Mill	
16770 Rebar Road Baldwin, Florida 32234	Service Type Certified Mail
2. Article Number 7000 1670 0013 3110 2233 (Transfer from service label)	
PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-1540	

