

Department of Environmental Protection

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

David B. Struhs Secretary

January 27, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Re: Permit Amendment – Clarification of Ladle Metallurgy Furnace Compliance Requirements DEP File No. 0310157-004-AC (PSD-FL-261)

Jacksonville Mill Division Modernization

Dear Mr. Shumake:

On January 20, 2000 the Department received confirmation from Mr. Michael Leuck of AmeriSteel that the emissions from the Ladle Metallurgy Furnace (LMF) will be included in the Electric Arc Furnace emission limits for compliance/enforcement purposes rather than installing a separate stack for the LMF. Accordingly, this letter amends Specific Condition No. 6 of the permit as indicated below:

Specific Condition No. 6

Emissions from the reheat and ladle furnaces shall not exceed any of the following limits based on 8,500 hours per year operation. [Rule 62-212.400, F.A.C.]

- A. PM/PM₁₀ 2.4 lbs/hr and 10.2 TPY.
- B. CO 0.035 lbs/MMBtu, 7.7 lbs/hr, and 33 TPY.
- C. NOx 0.19 lbs/MMBtu and 179.3 TPY.
- D. Visible emissions 15 percent opacity.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permitting decision is issued pursuant to Chapter 403, Florida Statutes.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen 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

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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 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department'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 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 indicate; (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 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 Department'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.

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

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of

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any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This permitting decision is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this order will not be effective until further order of the Department.

Any party to this permitting decision (order) has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under Rule 9.110 of the 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 must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director Division of Air Resources Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this PERMIT AMENDMENT was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 1-28-00 to the person(s) listed:

Mr. Donnie Shumake*

Mr. Ron Roberson, RESD

Mr. Gregg Worley, EPA

Mr. John Bunyak, NPS

Mr. Chris Kirts, NED

Mr. Michael Lueck, AmeriSteel

Clerk Stamp

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

Z 031 391 923

US Postal Service

Receipt	for	Certified	Mail
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No Insurance Coverage Provided.

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PS Form 3800, April 1995	PSD-F1-261			
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the reverse side?	SENDER: Complete items 1 and/or 2 for additional services. Complete items 3, 4a, and 4b. Print your name and address on the reverse of this form so that we card to you. Attach this form to the front of the malloiece, or on the back if space permit. Write "Return Receipt Requested" on the mallpiece below the article. The Return Receipt will show to whom the article was delivered and delivered.	I also wish to receive the following services (for an extra fee): 1. Addressee's Address 2. Restricted Delivery Consult postmaster for fee.		
ADDRESS completed on t	3. Article Addressed to: Shunake, V.P. AmeriStel Corp. POBOX 518 Baldwin, FI 32234	4a. Article Number 203 39 923 4b. Service Type Registered Express Mail Return Receipt for Merchandise 7. Date of Delivery		9Z3 Certified Insured COD
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TO:	Howard L. Rhodes
THROUGH:	Clair Fancy Al Linero
FROM:	John Reynolds
DATE:	January 25, 2000
SUBJECT:	Amendment of Construction Permit No. 0310157-004-AC (PSD-FL-261) AmeriSteel Corporation Baldwin Mill Expansion

Approval is requested for an amendment of the subject construction permit. The discussion below explains why the amendment is needed.

The AmeriSteel facility produces steel reinforcing bars and steel rod. Primary steel production operations include an electric arc furnace (EAF) housed in a melt shop building, a continuous caster, a billet reheat furnace, a rolling mill and a rod mill. The steel works operations consist of melting and refining recycled scrap steel in the EAF, casting the refined steel into billets, reheating the steel billets and then rolling the steel billets into products (concrete reinforcing bars and wire).

The EAF has natural gas-fired burners to preheat and assist in melting the scrap steel. Before tapping the EAF, the ladle is preheated by a natural gas fired burner to prevent thermal shock when it contacts the molten steel. The EAF has 3 ladle heaters, all of which are enclosed in the melt shop building. After tapping, the ladle containing the molten steel is transferred by an overhead crane to the continuous caster. The slide gate for the ladle is opened to allow molten steel to flow into the continuous caster producing billets that are approximately 5 inches square by 30 feet long. The billets are stored under a roof until they are sent to the reheat furnace.

The billets are heated and then fed, one at a time, to the rolling mill. The billets pass through a series of mill stands to form either concrete reinforcing bars or wire. Emissions from the billet reheat furnace are uncontrolled and exit through an individual stack.

The permit provides for the construction of a ladle metallurgy furnace (LMF) to allow the EAF to tap at a lower temperature, thus decreasing tap to tap time while allowing different grades of steel to be produced at higher quality. Refining, which now occurs in the EAF at the end of the heat, will occur in the ladle. However, the design of the LMF had not been finalized at the time the permit was issued. A decision had not been made as to whether or not a separate stack would be provided for the LMF. AmeriSteel has now decided that a separate stack will not be installed for the LMF. The LMF emissions will be combined with EAF emissions and will be exhausted through the EAF baghouses. The amendment consists of striking out the reference to "ladle furnace" in the condition that limits furnace emissions. This means that the LMF emissions are included in and covered by the EAF/melt shop emission limits.

Attachments

APPENDIX BD REVISED BEST AVAILABLE CONTROL TECHNOLOGY (BACT)

AMERISTEEL CORPORATION JACKSONVILLE MINIMILL MODIFICATION PSD-FL-261 and 0310157-004-AC Duval County

AmeriSteel Corporation has applied to modify its existing scrap steel recycling facility near Baldwin in Duval County, Florida. The facility produces steel reinforcing bars. The primary steel production operations include a Fuchs electric arc furnace (EAF), a Rokop continuous caster, a billet reheat furnace, a rolling mill and a rod mill. Particulate emissions from the meltshop are controlled by Baghouses 1-2 and Baghouses 3-4. Permitted steelmaking capacity for the facility is currently 600,000 tons per year. Actual steel production has averaged 558,000 tons per year for 1997 and 1998. This modification includes increasing the production capacity to 720,000 tons per year by making several changes to the process equipment.

The physical changes covered under this construction permit application are:

- 1. Installation of larger capacity current carrying arms at the EAF. These current conducting arms transmit electricity from the transformer to the electrodes in the EAF.
- 2. Construction of a new scrap handling building adjacent to the existing EAF shop. The building will be used to improve the handling and mixing of scrap, and to accommodate the increased amount of scrap required for the increased EAF production.
- 3. Construction of a ladle metallurgy furnace (LMF) to allow the EAF to tap at a lower temperature, thus decreasing tap to tap time while allowing different grades of steel to be produced at higher quality. Refining, which now occurs in the EAF at the end of the heat, would occur in the ladle. The addition of the LMF will not result in a production increase above the 720,000 tons/year requested in this application. LMF emissions will be combined with EAF emissions and will be exhausted through the same two baghouses. AmeriSteel will provide the Department with information on the LMF and perform any additional analyses required as soon as the design is finalized.
- 4. Extension of the tapping pit so the newly tapped ladle can clear the EAF roof. This will provide additional time for furnace operation. Presently, the tapping pit's size delays the beginning of a new cycle (charge to tap) of steel production. Before the furnace roof rotation takes place, the newly tapped ladle has to clear the tapping pit and then be moved east. This process takes approximately three minutes. If the tapping pit is extended, the furnace roof can rotate before the ladle clears the pit, thus decreasing the delay of the new cycle. With these changes, the furnace heat time could be shortened to as low as 50 minutes and liquid steel production could average as much as 100 tons per hour for each operating day.

(The following process description is based on the EPA's 1983 background document for revised new source performance standards for Electric Arc Furnaces. Some differences may exist between AmeriSteel's process and the following description).