### United States Environmental Protection Agency Region IV POLLUTION REPORT

Date: Tuesday, January 25, 2011

From: Terry Stilman, On Scene Coordinator

Subject: Continuation of Removal Action Gulf States Steel 2800 Norris Ave, Gadsden, AL Latitude: 34.0119000 Longitude: -86.0469000

POLREP No.:	25	Site #:	A499
<b>Reporting Period:</b>	12/21/2010 - 1/20/2011	<b>D.O.</b> #:	
Start Date:	8/1/2007	<b>Response Authority:</b>	CERCLA
Mob Date:	8/1/2007	<b>Response Type:</b>	Time-Critical
<b>Demob Date:</b>		NPL Status:	Non NPL
<b>Completion Date:</b>		Incident Category:	Removal Action
CERCLIS ID #:	ALD004014973	Contract #	
RCRIS ID #:			

### **Site Description**

Gulf States Steel, Inc. began operations at the site on February 1, 1986, although the facility was previously operated and owned by other entities since its construction since 1902. Gulf States Steel was a fully integrated steel manufacturing facility that manufactured a diversified product line including steel plates, hot and cold rolled steel sheets, and galvanized steel sheets. Major process operations occurred at the coke and by-product plant, the blast furnace area, and at the basic oxygen plant. The coke and by-product plant at the Gulf States Steel site produced metallurgical coke, and coke oven gas, coal tar, ammonium sulfate, light oil, and naphthalene through the distillation of coal with a high volatile organic content in the absence of air. There are four waste oil lagoons which are unlined surface impoundments that were apparently used to reclaim waste oil form wastewaters generated by steel finishing processes.

On January 22, 2007, EPA conducted a Site Assessment at the Site, by RPM Jordan Garrard. During site assessment several items were observed including bulging drums, leaking aboveground storage tanks (ASTs) containing listed hazardous wastes, and oil spills. RPM contacted the Removal Section of the ERRB to initiate a Removal Site Evaluation (RSE). RPM Garrard continued with site assessment activities, including waste stream sampling of drums and ASTs, and surficial soils in the coke plant area. On February 21, 2007, OSC Randy Nattis conducted a RSE. Based on analytical results from waste stream samples and field observations; including unsecured drums, leaking ASTs, and evidence of trespassing, the Site was found to pose an immediate hazard to human health and the environment. A Time-Critical Removal Action began in September 2009 to address the hazards associated with the Powerhouse, lagoons and Slag Piles.

Remaining work has focussed on two slag piles. The slag piles are the source of continued release of characteristic hazardous waste. The caustic leachate containing pH values as high as 12.5 from the slag piles is directly discharging into Black Creek, an adjacent wetland area, and a residential neighborhood from drainage ditches outside the Site fence. Sloughing of slag from the piles has been observed on both the northern and southern piles. The sloughing allows for the production of more leachate due to the increase in surface area of new unweathered slag.

# **Current Activities**

Slag processing from both the North and South piles continues. Material from both piles is transported to an on-site processing facility for separation. Recyclable material is transported off-site. Non-recyclable material is moved to an area close to the North pile for consolidation and capping to halt the further production of high pH leachate.

Leachate coming from slag piles is currently being monitored for pH. Air monitoring for particulates is also conducted during operations.

On January 4, EPA, ERRS and START met to discuss results of the past years slag processing and future

options. The following were discussed:

Approximately 25% of the slag piles have been processed.

Much of the top portion of the North pile has been found to contain low percentages of recoverable materials.

The bottom of the North pile and the South pile are believed to be the major source of caustic leachate affecting the Site.

Processing of the slag from the top of the North pile may be increasing its volume, thereby reducing the potential for ultimately containing of the slag in an on-site landfill and eliminating further release of caustic leachate.

Investigation (trenching) of the South and North pile has found higher percentages of recoverable material in the South pile and the lower portion of the North pile.

### **Planned Removal Actions**

Slag screening, reclamation and leachate reduction operations will continue.

Based on the results of the slag processing in 2010 the following changes will be made:

An additional processing plant (the original pilot plant) will be moved closer to the South pile to allow for simultaneous processing of both piles (anticipated March 14).

The top of the North pile will be moved directly to the on-site landfill, thereby reducing the amount of space needed for landfill creation and increasing the Site productivity (anticipated January 15).

## Next Steps

As changes are made, activities will continue to be monitored to determine the optimal effectiveness.

## **Key Issues**

As the dry season approaches, duct control will be a major focus.

response.epa.gov/GulfStatesSteel