

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

**Date:** Thursday, May 29, 2008

**From:** Jordan Garrard

**Subject:** Gulf States Steel

2800 Norris Ave, Gadsden, AL

Latitude: 34.0119000

Longitude: -86.0469000

<b>POLREP No.:</b>	9	<b>Site #:</b>	A499
<b>Reporting Period:</b>		<b>D.O. #:</b>	
<b>Start Date:</b>	8/1/2007	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	8/1/2007	<b>Response Type:</b>	Time-Critical
<b>Demob Date:</b>		<b>NPL Status:</b>	Non NPL
<b>Completion Date:</b>		<b>Incident Category:</b>	Removal Action
<b>CERCLIS ID #:</b>	ALD004014973	<b>Contract #</b>	
<b>RCRIS ID #:</b>			

#### **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 from wastewaters generated by steel finishing processes.

Gulf States Steel was listed in the CERCLIS database with a discovery date of August 1, 1980; however, the site is currently not on the NPL. Gulf States Steel entered the RCRA program as a treatment, storage, and disposal facility (TSDF) on September 25, 1990. The Site was listed as a large quantity RCRA generator. On September 27, 1994 Gulf States Steel entered into a Consent Decree with the USEPA. Due to sampling results of sediments in Black Creek the Superfund Remedial Branch began RI/FS activities.

On July 1, 1999, Gulf States Steel filed a voluntary petition for bankruptcy under Chapter 11. After a lengthy attempt to reorganize and emerge from bankruptcy, on November 14, 2000, the Chapter 11 reorganization bankruptcy was converted to a Chapter 7 liquidation bankruptcy. As part of that liquidation, the United States was able to recoup approximately \$2 million which has been placed into a special account to be used to conduct and/or finance response actions at the Site. By Order dated December 5, 2006, the U.S. Bankruptcy Court closed the GSS bankruptcy. The funds received through the bankruptcy settlement have been tentatively allocated to address the ecological impacts emanating from the sediments in the 4 waste water lagoons

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, pose an immediate hazard to human health and the environment. OSC Nattis identified along with RPM Garrard and START, 8 different tasks that warranted time critical removal action based upon those factors listed under Section 300.415(b)(2) of the NCP.

#### **Current Activities**

Both Coke batteries (Coke ovens) and associated structures are being demolished, recycled, scrapped

and disposed of for the following reasons:

- Coal Tar; There are numerous pipes and areas along batteries 1 and 2 that are leaking coal tar material onto the ground and under the batteries in the basement area. This is especially present during warm days when the materials viscosity changes and the material is more “flowable”. Based upon the coal tars chemical characteristics it is a threat to human health and the environment.
- Trespassers; There are numerous scavengers and thieves that venture onto the site especially at night. The on-site security has on numerous occasions called the local police to remove intruders. The batteries do contain a significant quantity of copper which a majority is located in the basement. This basement is full of hazards and potentially could cave in. Also the basement floods and is currently flooded.
- Dilapidated Batteries/Structures; Both batteries and all associated structures are in poor shape with most having almost no structural integrity. Concrete has been deteriorated because of acid gasses from the coke plant. Metal I-beams have rusted away and flooring has rotted out. These batteries/structures would be condemned if observed by a building inspector.
- Asbestos; There are numerous piping runs throughout the batteries which are asbestos containing materials (ACM). Exposure to friable asbestos if not wearing proper protective equipment is a possibility to anyone who does not understand the danger.
- Hidden sumps; There are numerous floor sumps in the batteries which are covered by rotten and deteriorated metal grading. It would be very easy to fall through the floor and into a sump. These sumps contain liquid and sludge whose chemical characteristics would be a threat to human health and the environment.

Please see [www.epaosc.org/GulfStatesSteel](http://www.epaosc.org/GulfStatesSteel) for the pictures

Stabilization and solidification (S/S) at Lagoon #1 (L-1) continues. To date, approximately 40% has been completed. Pulverized concrete from B-9 and the secondary contaminant areas for T-001 and T-003 as well as Cell 1 (former benzene tank farm) is being used for fill. Please see [www.epaosc.org/sites/3336/files/l-1\\_052108.pdf](http://www.epaosc.org/sites/3336/files/l-1_052108.pdf) for the latest completion map.

Tasks 1 - 7 are complete. The only remaining tanks from the Task 8 area are T-10, T-12, T-14, and T-16. These tanks contain a total of 500,000 (last POLREP mentioned an approx. 750,000 gallons, but latest measurements are more accurate) gallons of petroleum contact ammonia water. The solution contains 660 ppm of Ammonia. Current disposal options are in place and will commence within the next 2 weeks.

Remaining C/D wastes and well as ACM wastes are being loaded into properly lined roll off boxes and are being sent off for disposal

EPA and START investigated the Power plant on site for evidence any Hazardous material or any friable ACM. In the initial findings, both were found. Additional assessments and samples maybe required.

Metal recycled - ~7,303,369 pounds.

### **Planned Removal Actions**

Continue T&D activities at coke plant. These activities include C&D material, ACM, transformers and coal tar coated pipes, T-010, T-012, T-014, T-016 and the Ammonium Sulfate in B-3.

The Disposal of the Ammonia water should take place within the next 2 weeks.

The Disposal of the Ammonium Sulfate should take place within the next 2 weeks. Once the disposal is complete, the demolition of B-3 will commence.

Continue to scrap steel and other metals from demolition from Coke ovens and associated structures.

Continue S/S of L-1. Oily sediments are much deeper than first thought (10 - 15 feet). Therefore, additional quick lime will be needed for the S/S. The first part of L-1, considered to be the 'fingers' seemed to have precipitated out the heaviest of the oils / sediments, which required about a 4 - 5% mixture ratio of lime. The rest of the sediments are much lighter in nature and are requiring at least a 10% mixture ratio, which is significantly driving up the cost of lime. To counter balance this, we are bringing in a crusher to crush up the bricks from the coke ovens to use in the mixture. This will replace the additional lime needed to S/S L-1, lowering the amount of lime needed for the rest of the S/S activities (The silica brick contains CaO 8% to 10%).

Occupational and perimeter silica air sampling and monitoring will be in place during the crushing operation.

Additional assessments of the Power Plant will be required. In the mean time, EPA will no longer allow access to the Power Plant until further notice. If access is required, EPA oversight, including proper training (Hazardous waste operations and emergency response. - 1910.120) will be required to access the structure.

### **Next Steps**

Continue evaluation of recycling / reclaiming the 2 slag piles.

Demolition of B-3 and T-010, T-012, T-014, T-016.

Land reuse planning with E2 and the city of Gadsden.

### **Key Issues**

Trespassers taking risks to access the coke oven and other structures to strip and dismantle scrap metal, copper and other metals. EPA may contact FBI for assistance.

Ammonium Sulfate in B-1.

Ammonia water remaining in T-10, T-12, T-14, T-16

Organic Fumes, Overhead hazards, falling objects during demolition operations, slips around lagoon areas and hot and cold stress.

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