

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

**Date:** Thursday, November 15, 2007

**From:** Jordan Garrard

**Subject:** Gulf States Steel

2800 Norris Ave, Gadsden, AL

Latitude: 34.0119000

Longitude: -86.0469000

<b>POLREP No.:</b>	5	<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**

-14,000 gallons in Frac Tank #N48660 - disposed

-13,000 gallons of oil collected from the skimming operation by lagoon #1 in Frac Tank #FM310 - analysis received, awaiting disposal - fuel blender  
-11,000 gallons in Frac Tank #N45684.

Steel recycled - 441,332 pounds  
Copper recycled - 11,329 pounds

Waste water treatment has stopped on site as of 10/22/07.

Tanks T-033, T-043, T-055, T-057, T-059, T-061, T-063, T-068 and the in ground oil/water separator label on the map as B-14 have all been addressed. The process of being address includes cutting open with the shears, scooping out the solid and liquid sludges and stabilizing with quicklime (CaO). The stabilized material was then place in Cell 1 for bulking.

Process vessels T-034, T-036, T-038 have all been assessed and it has been determined by visual inspection and air monitoring that there is no hazardous material inside and therefore will not be address as part of this removal action. These 3 process vessels were part of Task 6.

The B-9 building and the associated process vessels (process vessels are unlabeled on map but are directly to the northeast of B-9), precipitators and tanks have all been assessed and it has been determined by visual inspection and air monitoring that there is no hazardous material inside and therefore will not be address as part of this removal action. However, it should be noted that extremely friable ACM is located within B-9.

To date, there is an approximately 280 cubic yards of stabilized material.  
Cell #1 has a total capacity of approximately 360 cubic yards.  
Cell #1 is at 80% capacity.

Phase 2 and 3 of the L1 treatability study has been completed.  
Phase 2 consisted of the Lithology study and product migration.  
Phase 3 consisted of pumping down L1 to accurately determine recharge from groundwater. The pump test ran from 11/13/07 > 11/14/07, running 22 hours. The test was coordinated with the USCG AST, who brought 2 2000gmp pumps and 4 additional personal. Pumping started at 0900 on 11/13/07 and ended at 0730 on 11/14/07 with little down time for refueling and setting up additional pump. Pump flow rate was a constant 1250 gallons per minute (gmp) \* 2 (~2500 gmp). Total volume pumped was 2,876,600 in which L1 dropped 3.1 feet. So far in the 24 hours since the end of the pumping, the lagoon has not recharged.  
Based on the final determined recharge rate, removal options and costs L1 will be developed by 11/30/07.

### **Planned Removal Actions**

ERRS will continue to access, shear piping and associated AST's in Task 3 and 5. Continue assessment of overhead pipe run in and around task 5. Clean and cut steal from T-043.

START will continue to oversight and collection of samples as needed for organics resulting from the sludge stabilization process.

USCG will continue air monitoring during the stabilization, shearing and removal operation.

An additional Cell is being developed in the benzene tank farm next to Cell #1 for additional containment volume. Cell #2 should be prepared and should be finished after the holiday demobilization.

All site activities will stop for holidays. Site will demobilize on 11/17/07 and remobilize on 11/26/07.

### **Next Steps**

Access, open, and stabilize materials in tanks: T-045, T-047, T-049, T-053 (Task 3) and T-048, T-050, T-052, T-054, T-056, T-058 (Task 5).

Assess process vessels and precipitators associated with Task 6. This process involves opening all the access points to determine if the precipitators are baffled.

### **Key Issues**

CaO sludge stabilization - Must maintain proper mixing ratio to minimize off gassing. ERRS and START with approval from USCG and EPA developed a SOP on mixing, communications and proper PPE.

T-010, T-012, T-014 and T-016 which during the colder season was determined to just be water and a solid sludge layer on the bottom. The materials in these tanks are now starting to phase back to water and a hard sludge on the bottom. It is anticipated in January, the water / NH<sub>3</sub> mixture will be completely phased out. The water will be sampled and discharged accordingly to gain access to sludges on the bottoms

Benzene and other Organic fumes detected during removal of tanks, process vessels and pipes.

Benzene and other Organic fumes detected during the development of Cell #2.

Other key issues include:

- Overhead hazards
- Falling objects during the demolition operations and decreased structural integrity of buildings surrounding Tasks 3 and 5.
- Splash hazards from shearing and opening pipes.
- Cold Stress
- Thunderstorms

[www.epaosc.org/GulfStatesSteel](http://www.epaosc.org/GulfStatesSteel)