

United States Environmental Protection Agency
Region IV
POLLUTION REPORT

Date: Thursday, April 24, 2008

From: Alyssa Hughes

To: Jim McGuire, ERRB

Subject: FINAL POLREP - Decontamination, Decommissioning and Contractor Demobilization
Aluminum Finishing of South Carolina
566 Fuldner Road, Barnwell, SC
Latitude: 33.2526870
Longitude: -81.3776780

POLREP No.:	6	Site #:	A4NK
Reporting Period:	4/14-17	D.O. #:	0704-F4-0006
Start Date:	2/4/2008	Response Authority:	CERCLA
Mob Date:	2/4/2008	Response Type:	Time-Critical
Demob Date:	4/17/2008	NPL Status:	Non NPL
Completion Date:	4/17/2008	Incident Category:	Removal Action
CERCLIS ID #:	SC0000028004	Contract #	EP-S4-07-04
RCRIS ID #:			

Site Description

The Aluminum Finishing of SC Site (Site) is the location of a former aluminum anodizing and coloring facility. The site was owned and operated from approximately 1999-2004 by the Aluminum Finishing of South Carolina Corporation. The Site is no longer in operation. Based on a review of Barnwell County records, the site was sold in a tax sale on November 7, 2005. At that time, the property was titled to REOCO, LLC of Jupiter Lakes, Florida. (Ref 1)

The Site is located at 566 Fuldner Road, Barnwell, South Carolina. Recent inquiries have indicated that Fuldner Road has been renamed as Joey Zorn Boulevard, however, Barnwell County documents continue to list the address as Fuldner Road. The property is approximately thirteen acres and is located in an industrial park adjacent to the Barnwell County airport. There is one-story steel frame structure on the Site, which housed the aluminum finishing operation. There is a stormwater retention pond on the southeast side of the property and a small paved parking lot located on the northeast corner. Water supply to the Site is provided by the Barnwell County public water system. The Barnwell County Sheriff's office is located directly across from the Site.

In January 2007, REOCO, LLC initiated a Phase I Environmental Site Assessment (ESA) at the Site. The Phase I ESA was completed between February 15 and April 10, 2007. The Phase I included a review of historical records, a site inspection and sampling and analysis of some of the waste streams at the Site. The Phase I report identified numerous tanks and containers both inside and outside the building on the Site. (Ref 3). The following were documented in the Phase I ESA report:

- Fifteen fiberglass vats, ranging in size from 5,000 to 6,000 gallons located inside the building. Vats contain liquid, sludge and/or precipitate;
- At least three isolated containment units beneath the open vats, which contain liquid, sludge and/or precipitate;
- Two above ground tanks inside the building which contain a slightly caustic solution;
- One above ground stainless steel tank which has a corroded foundation and is leaning against the east wall of the building;
- Several plastic totes and 55-gallon drums of new and spent acids, caustics and additives inside the building;
- Numerous containers of laboratory chemicals, paints and other hazardous materials near the electrical room;
- Several plastic totes, drums and containers located outside on the west side of the building. At least three fiberglass above ground storage tanks located outside. Containers are labeled as new/spent acids, caustics and additives.

At 0730 on May 31, 2007, EPA and ERRS contractor WRS arrived at the Site. A representative from

DHEC was also on site. EPA and ERRS discussed health and safety issues at the Site. ERRS worked throughout the day to accomplish the following tasks to stabilize the Site:

- Overpacked two leaking drums with pH 1;
- Moved and secured 25 full drums into the building;
- Moved and secured 13 partially full drums into the building;
- Moved and secured 10 partially full 250 gallon totes into the building;
- Moved 29 empty drums into the building;
- Collected samples from three drums and one above ground storage tank;
- Performed hazard categorization field screening on the four samples. Results indicated three drum samples with pH < 2 and one tank sample with pH 12;
- Shipped four samples off site for laboratory analysis.

EPA OSCs conducted air monitoring around the containers and throughout the Site during the emergency response action. No elevated readings were detected on the PID, FID and 4-gas meter. In addition, a radiation survey was conducted and no readings were detected above background (12 uR/hr).

EPA and ERRS completed all emergency response actions and demobilized from the Site on the morning of June 1, 2007.

Current Activities

During this final reporting period, the ERRS crew focused their efforts on decontaminating the entire facility and decommissioning vats in order to deter future use.

On Monday, April 14 the containerized waste was picked up and transported for disposal at Environmental Enterprises in Cincinnati, Ohio. The shipment consisted of twenty-four (24) 55-gallon drums and 1 1800-gallon tote of sulfuric acid, waste code D002, Two (2) 55-gallon drums of ammonia, waste code D002, and one 55-gallon drum glacial acetic acid, waste codes D001 and D002. In addition, two (2) 55-gallon drums of anodal etch additive b liquid, two (2) drums of amberline resin, ten (10) drums of anoseal, and two (2) drums of caustic soda beads were disposed of as non-hazardous waste at CMEG in Walterboro, South Carolina. This shipment concluded the disposal of hazardous waste from the site.

On Monday, April 14 the crew resumed efforts at stabilizing the sludges in vat 3. Saw dust was acquired from a local vendor, added to the sludges and mixed with the excavator. The saw dust successfully stiffened the material in order to allow the super sorbent to more efficiently set it. Two additional bags of super sorbent polymer were used to complete the solidification of vat 3 sludges. The excavator was used to remove the majority of sludges prior to technicians entering the vat. Once the techs successfully decontaminated the half of the vat closest to the catwalk, the vat was cut in half and removed with the excavator. Due to the density of the material, the most efficient way to remove the bulk of it was by utilizing the excavator and this could only be accomplished by removing half and moving the back half closer to the access point. Once the entire vat was decontaminated, it was moved close to vats 1 and 2 in order to fully decontaminate the containment area surrounding these vats.

A total of 7 roll-off containers, totaling 68.7 tons, were transported and disposed of during this final reporting period. Over the course of the removal, 160.501 tons of solid non-hazardous wastes were disposed of at the Three Rivers Subtitle D Landfill. Please see the Waste Disposition Summary for a final report of all waste disposal.

A full site decontamination consisted of pressure washing all of the vats, pressure washing the containment areas, and dry decontaminating the facility floor. After full decontamination, all of the vats were decommissioned by cutting a hole on the side near the bottom of the vats. Once all activities were completed, the fuses on the crane were pulled in order to disable it for future use. For photographs depicting the final state of the facility, please refer to the images section of the site.

Disposition of Wastes

HAZARDOUS WASTE DISPOSITION

Corrosive, Toxicity Characteristic for Chromium (D002, D007) - Vickery Environmental Vickery, OH

- 3/27 3917 gallons
- 4/1 4013 gallons
- 4/3 3489 gallons
- 4/11 3622 gallons

Containerized Corrosive Waste (D002) - Environmental Enterprises Cincinnati, OH

- 4/14 3230 gallons (26 55-gallon drums, 1 1800-gallon tote)

Containerized Ignitable, Corrosive Waste (D001, D002) - Environmental Enterprises Cincinnati, OH

- 4/14 55 gallons (1 55-gallons drum)

NON-HAZARDOUS WASTE DISPOSITION

Liquids Treatable to within POTW Limits - City of Barnwell Sewage Treatment Plant Barnwell, SC

- 4/2 15,759 gallons

- 4/8 14,960 gallons

Liquids Untreatable to within POTW Limits - Clean Management Walterboro, SC

- 4/8 11,100 gallons

Containerized Liquids - Clean Management Walterboro, SC

- 4/14 830 gallons (14 55-gallon drums)

Solids - Three Rivers Subtitle D Landfill Aiken, SC

- 3/27 1.61 tons

- 4/1 5.771 tons

- 4/5 10.49 tons

- 4/7 9.21 tons

- 4/8 6.90 tons

- 4/8 8.62 tons

- 4/8 9.43 tons

- 4/8 8.02 tons

- 4/9 7.23 tons

- 4/9 8.62 tons

- 4/9 9.43 tons

- 4/11 6.47 tons

- 4/14 11.33 tons

- 4/14 9.58 tons

- 4/15 9.8 tons

- 4/16 11.36 tons

- 4/16 10.57 tons

- 4/17 9.47 tons

- 4/17 6.59 tons

response.epa.gov/aluminumfinishing