

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

Date: Thursday, September 24, 2009

From: Subash Patel

To: Jim McGuire, ERRB

Chris Masterson, EPA

Subject: Final POLREP

MOBILE AMERICAN BUMPER PLATING SITE

1654 Navco Road, Mobile, AL

Latitude: 30.6338510

Longitude: -88.1058080

POLREP No.:	6	Site #:	04GL
Reporting Period:		D.O. #:	
Start Date:	7/22/2008	Response Authority:	CERCLA
Mob Date:	7/21/2008	Response Type:	Time-Critical
Demob Date:	3/20/2009	NPL Status:	Non NPL
Completion Date:	3/20/2009	Incident Category:	Removal Action
CERCLIS ID #:	ALD008214090	Contract #	
RCRIS ID #:			

Site Description

The Mobile American Bumper and Plating site is located at 1654 Navco Road in Mobile, Alabama. The site is bordered by residential properties to the North and East and by Interstate 10 to the South. Approximately 250 feet of wooded land separates the site from residential properties to the West. The site is a former chrome plating operation that encompasses approximately 9 acres. The site consists of an approximate 120,000 square foot, steel-clad building, two shallow concrete-lined surface impoundments, and two concrete-lined ponds. The topography is relatively flat. Surface drainage from around the facility flows to the south via drainage ditches that discharge to a concrete culvert parallel to Interstate 10.

On 1/22/2008 the EPA On-Scene Coordinator (OSC), at the request of the City of Mobile, Alabama, met at the American Bumper site with all stakeholders involved to assess the presence of hazardous materials. The facility was abandoned and in severe, structural disrepair. The various chemicals, containers and some vats were completely exposed to the external elements. Several containers were severely deteriorated and releasing their contents directly unto the surrounding ground and environment. Ongoing trespassing and vagrancy was apparent. As a result of the initial assessment the OSC initiated an Emergency Removal Action.

Subsequent to the emergency response, a Time Critical Removal Action (TCRA) was initiated on July 7, 2008 to address potential exposure to hazardous chemicals inside the building and surrounding property. The TCRA scope includes demolition and disposal of the building, disposal of solid and liquid wastes from the emergency removal action and an assessment of the surrounding soils, ponds and surface impoundments.

A ceiling-increase to the TCRA was initiated on February 17, 2008 to address disposal of hazardous concrete and erosion control at the site.

Approximately 20 houses surround the immediate area of the site.

Current Activities

1) Site Preparation July, 2008:

- 100 tons of nonhazardous debris were cleared and removed from the site. The debris consisted mostly of plastic bumpers.
- Electroplating facility was cleared of all accessible containers, vats, equipment, and debris. Metal was segregated for recycling.

- Fence was added in areas to surround the perimeter of site. Holes in existing fence were repaired.
- Air monitoring equipment was established.

2) Demolition Activities:

- Electroplating facility was dismantled due to poor structural integrity.
- An engineering firm determined the firewall in the middle of the facility would require extensive efforts to repair.
- Slab was cleared of demo residue and debris.
- Demolition completed on October 16, 2008.

3) Ponds and Surface Impoundments Closure:

- Two shallow surface impoundments lined with concrete and two interconnected wastewater ponds were closed. Sample results from sediments were below Removal Action Levels, and sample results from water were below Region 4 Screening Levels for tap water.
- Bricks from the electroplating facility's firewall were used as backfill for the ponds. Bricks were sampled prior to use as backfill.
- Water from the ponds and surface impoundments were used for on-site dust suppression.
- Sample results from surface impoundments' concrete lining did not warrant removal. The concrete was crushed and left in place. Bricks and clean soil were used to fill in the surface impoundments.

4) Non-Source Area Soil Excavation:

- One 50ft x 50ft grid was excavated due to nickel concentrations exceeding the Removal Action Level. The average depth removed was 1 foot. Results from the confirmation sample showed that no further excavation was required.

5) Source Area Excavation:

- The slab associated with the northern and southern electroplating lines were removed due to heavy staining, severe deterioration of the concrete, and TCLP analysis that indicated possible migration of contaminants into underlying soil.
- Soil under the northern and southern plating lines were stained. Six inches of soil was removed from the northern plating line area and 1 foot of soil was removed from the southern plating area. Results from the confirmation samples showed that no further excavation was required.
- Excavated areas filled with clean soil.

6) Restoration

- Site was graded and grass for erosion control.

7) Vats, Drums, & Containers

- About 20 vats and 100 drums and containers were identified. Similar wastes from these items were bulked prior to disposal in one of eight waste streams.

- No buried drums were found on site. Ground Penetrating Radar was used to look for buried metal.

8) Paint Building

- No buried drums or contamination was found underneath the Paint Building. Soils underneath the slab were sampled.

9) Community Involvement

- Two public meetings were held near the site.
- First public meeting was held on September 8, 2008. The meeting informed residents about site activities, contamination found, and expected duration of the site.
- Second public meeting was held on March 2, 2009. Meeting focused on letting the community know that site activities were near completion.

Key Issues

Only a portion of funds from recycled metal money was received. The recycling company appears to be filing for bankruptcy.

Disposition of Wastes

Waste Stream A:

Thirteen 250-gallon totes, twenty-four 55-gallon drums, and five 5-gallon pails consisting of liquid material that tested positive for cyanide. Waste stream was hazardous for arsenic, chromium, cadmium, and total cyanide between 0.2mg/L and 90mg/L. Total nickel concentration was up to 341,000mg/L. EPA waste codes applied are F007 and D004.

Waste Stream B:

Seven 250-gallon totes, five 55-gallon drums, and one 30-gallon drums consisting of liquid material. Waste stream tested positive for cyanide and was hazardous for chromium, cadmium, total cyanide between 807mg/L and 4,180mg/L. Total nickel concentration ranged from 48.9mg/L to 387mg/L. EPA waste code was F007.

Waste Stream C:

Two 250-gallon totes and three 55-gallon drums consisting of liquid material that tested positive for cyanide. Waste stream was hazardous for cadmium and total cyanide of 82,300mg/L. Total nickel concentration was 75mg/L. EPA waste code was F007.

Waste Stream D:

One 55-gallon drum consisting of solid material. Waste stream was hazardous for total cyanide. Concentration was 11,800mg/L. Waste consisted of plating bath residues from the bottom of plating baths and electroplating operations where cyanide was used. EPA waste code was F008.

Waste Stream E:

One 55-gallon drum and one 5-gallon pail consisting of non-hazardous liquid material.

Waste Stream F:

One 20-gallon drum and one 55-gallon drum which consisted of non-hazardous solid material.

Waste Stream G:

Three 250-gallon totes, eight 55-gallon drums, one 40-gallon drums, one 20-gallon drum, and twenty-four 5-gallon pails which consisted of non-hazardous liquid material. Total nickel concentration was up to 55mg/L.

Waste Stream H:

Eighteen 55-gallon drums, two 30-gallon drums, and one 20-gallon drum consisting of non-hazardous solid material. Total nickel concentration was up to 434 mg/L.

Waste Stream I:

One 5-gallon pail consisting of non-hazardous solid material containing total nickel concentration up to 24,800mg/L.

Waste Stream J:

Two 5-gallon pails consisting of hazardous inorganic acid containing a pH less than 2 and chromium over TCLP regulatory limits. Waste codes applied were D002 and D007.

Waste Stream K:

Four 250-gallon totes and one 55-gallon drum consisting of liquid material. Waste stream was hazardous for chromium which exceeded TCLP regulatory limits. Waste code applied was D007.

Waste Stream L:

One 55-gallon drum consisting of sludge material. Waste stream was hazardous for chromium which exceeded TCLP regulatory limits. Waste code applied was D007.

Waste Stream M:

Four 5-gallon pails consisting of hazardous liquid material with a pH of 13.7. EPA waste codes were D001 and D002.

Waste Stream N:

Two 55-gallon drums, one 20-gallon drum, two 15-gallon drums, and two 5-gallon pails consisting of a pH of 1 and a flash point < 110 degrees F. EPA waste code were D001 and D002.

Waste Stream O:

One 250-gallon tote and twenty-three 55-gallon drums consisting of hazardous liquid material. TCLP regulatory limits were exceeded for arsenic, cadmium, chromium, lead, selenium, and silver. EPA waste codes were D004, D006, D007, D008, D010, and D011.

Waste Stream P:

One 5-gallon pail consisting of liquid material with a pH of 13.

Waste Stream Q:

Two 30-cubic yard roll-offs consisting of solid material that tested positive for cyanide. Total cyanide concentration was 29,900mg/kg and amenable cyanide concentration was 11,500mg/kg. Waste consisted of plating bath residues from the bottom of plating baths of electroplating operations where cyanides were used in the process. EPA waste code was F008.

Waste Stream R:

Three 30-cubic yard roll-offs which consisted of construction and debris material containing ferrous iron, nickel, and cyanide dust from spilled plating bath residues and fine demolition debris containing cyanide and nickel residues. Total cyanide concentration was 328mg/kg, amenable cyanide concentration was 168mg/kg, and TCLP for chromium was 5.1mg/L. EPA waste code was F008.

Waste Stream S:

Lab packs consisting of two 55-gallon drums, seven 30-gallon drums, and fifteen 5-gallon pails. See Appendix E of TTEMI's final report for details.

Other waste streams:

About 100 tons of nonhazardous construction and demolition debris were sent to a state-permitted construction and demolition debris landfill.

About 2,500 tons of hazardous concrete mixed with soil which exceeded TCLP regulator limits for chromium were sent to a subtitle C landfill.

About 2,400 tons of nonhazardous soil was sent to a subtitle D landfill.

Light bulbs containing mercury were transported off-site as universal waste.

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