U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Hard Chrome Platers Spill - Removal Polrep
Final Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: **POLREP #2**
Final Polrep
Hard Chrome Platers Spill
B45A
La Vergne, TN
Latitude: 36.0261160 Longitude: -86.5599340

To: James Webster, USEPA R4 ERRB
Andy Binford, TDEC

From: Steve Spurlin, OSC
Date: 3/3/2015
Reporting Period: March 3, 2015

1. Introduction

1.1 Background

Site Number:	B45A	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	
Response Authority:	CERCLA	**Response Type:**	Emergency
Response Lead:	PRP	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	11/17/2014	**Start Date:**	11/17/2014
Demob Date:	11/19/2014	**Completion Date:**	12/30/2014
CERCLIS ID:	TNN000402938	**RCRIS ID:**	
ERNS No.:	1101204	**State Notification:**	11/16/2014
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

The incident is an emergency response to the release of chromic acid liquids from a hard chrome plating facility. On the afternoon of November 16, 2014, local responders discovered an unknown liquid flowing into a drainage ditch. The liquid was tracked back to a hard chrome plating business.

1.1.2 Site Description

The Site consists of a hard chrome plating facility that experienced an overfill of a chromic acid plating vat. The chromic acid overflowed onto the floor of the facility and migrated outside the building. The chromic acid impacted several commercial properties and flowed to a roadside drainage ditch that discharges to a nearby creek.

1.1.2.1 Location

The release occurred at the Hard Chrome Platers facility at 310 Sand Hill Road, La Vergne, Rutherford County, Tennessee.

1.1.2.2 Description of Threat

Chromic acid is a hazardous substance. The acid is toxic due to both its very low low pH and high chrome metal content. The hazardous substance impacted several properties where workers could come in direct contact with the material. The chromic acid flowed to an unnamed tributary to Hurricane creek where aquatic life could be threatened.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The Site consisted of areas impacted by the release of the chromic acid. These areas included surface soil areas and a drainage pathway leading to a creek. Sample collected as part of the response indicated elevated levels of hexavalent chrome, a more toxic chrome species.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

On November 16, 2014, local fire and police responded to the discovery of an uncontrolled release of chromic acid from a facility. The local fire department entered the building and discovered an overflowing chrome plating tank. The operator of the facility arrived at the facility and shut off the water hose causing the overflow of the tank. The exact quantity of the spill is unknown, but is estimated to be over 1000 gallons.

The U. S. Environmental Protection Agency (EPA) Duty Officer was notified of the incident by the National Response Center and the Tennessee Department of Environment & Conservation (TDEC). The operator of the facility hired an environmental contractor who covered the impacted areas outside the facility with plastic in an effort to minimize further migration. Since the material was covered, and no rain or additional cleanup work was anticipated during the night, OSC Spurlin mobilized on November 17, 2014.

2.1.2 Response Actions to Date

Upon arrival on-scene, OSC Spurlin met with representatives of the operator and TDEC. Chromic acid staining and pooled chromic liquids were observed on the facility property as well as on several nearby commercial properties. An estimated 1000' of drainage pathway from the facility to a creek was impacted by the release. EPA and TDEC discussed potential liability and needed cleanup actions with the operator. The operator declined to participate further in the cleanup citing financial inability to pay for the contractor.

EPA then met with the property owner, who agreed to hire an environmental contractor. The owner made the necessary arrangements to hire SWS Environmental Services (SWS), who started cleanup work at approximately 1200 hrs on November 18, 2014. The following summarizes the cleanup activities conducted by SWS on behalf of the property owner.

November 18 through November 23, 2014:

The following activities were performed by SWS:

- A 3,000 gallon vacuum truck was utilized to vacuum pools of discolored water from behind the 310 and 312 Sandhill Road properties, pools of liquid directly behind the property in an equipment storage lot, and at a parking area behind a Quick Fuel business with access to Sandhill Road, located approximately 600 yards northeast of 310 Sandhill Road.
- Sorbent boom was placed at two storm ditch outfalls along Sandhill Road.
- Both storm ditch culverts were flushed and the discharge water was collected at each outfall via the vacuum truck.
- All water removed from pools and the flushing operation were placed into totes.
- Water samples were collected after flushing the storm ditch outfalls.
- Soil was excavated to bedrock behind 310 Sandhill Road.
- Excavated soil was placed into roll off boxes.
- Excavation continued in two areas, behind 312 Sandhill Road and at the Quick Fuel parking area, because samples indicated high levels of hexavalent chromium.

November 24 through November 30, 2014:

- SWS continued excavation behind 312 Sandhill Road and at the Quick Fuel parking area.
- SWS collected waste characterization samples from totes (water) and composite soil from the nine roll off boxes stored on site.
- SWS, with assistance from Tetra Tech START, collected confirmatory composite soil samples from 310 Sandhill Road, 312 Sandhill Road, and the parking area behind Quick Fuel.

December 1 through December 8, 2014:

- Excavation was completed and conformation samples indicated that further removal was not necessary. SWS provided sampling results to EPA and TDEC for their evaluation regarding the need for further assessment of the site.
- SWS prepared for disposal of hazardous materials.
- Excavation areas were backfilled and graded.

December 19 through December 30, 2014:

- SWS transported the roll off boxes to AES located in Calvert City, Kentucky for disposal.
- SWS observed one of the roll off boxes at the staging area leaking liquid (storm water that had accumulated on December 23, 2014). EPA OSC Spurlin and Tetra Tech START were promptly notified.
- SWS foam-sealed each box and utilized a vacuum truck to remove any remaining liquids.
- SWS cleaned the boxes and hand excavated the soil from the area.

Waste **Disposal**

- 550 gallons of water was collected from pooling on and near the affected area, along with the water used to flush the ditches and culverts. Water collected during the project was transported to AES in Calvert City, Kentucky for disposal.
- 144.86 tons of contaminated soil and crushed rock were transported to AES in Calvert City, Kentucky for disposal.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

The PRPs for the incident have been identified as the operator and the property owner. An EPA Notice of Federal Interest letter of issued to both parties. The property owner hired a contractor to conduct a cleanup. Specific PRP contact information is available in the site files.

2.1.4 Progress Metrics

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*
chrome contaminated solids	soil	144.86 tons D007 RCRA waste			AES, KY
chrome contaminated liquids	wastewater	550 gals. D007 RCRA waste			AES, KY

2.2 Planning Section

2.2.1 Anticipated Activities

No further actvities by EPA are anticpated.

2.2.1.1 Planned Response Activities

2.2.1.2 Next Steps

All sample data will be shared with TDEC for their evaluation regarding the need for further assessment of the site. TDEC is discussing internally to determine wether the TDEC Solid Waste Program or the TDEC Remediation Program will be the lead for follow-up with the facility.

2.2.2 Issues

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

2.4.1 Narrative

An EPA site number and accounting string was established for the incident. A task order for START support was issued in the amount of $10,000. A small ceiling increase was processed to allow administrative closure of the site by START.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
TAT/START	$10,550.00	$10,550.00	$0.00	0.00%
Intramural Costs				
Total Site Costs	$10,550.00	$10,550.00	$0.00	0.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

No information available at this time.

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.