

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
R.N.Hitchcock Electroplating Facility - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II

Subject: POLREP #13
POLREP 13
R.N.Hitchcock Electroplating Facility
XG
Port Byron, NY
Latitude: 43.0383000 Longitude: -76.6286000

To:
From: Michael Hoppe OSC
Date: 11/4/2011
Reporting Period: 10/21-11/4/2011

1. Introduction

1.1 Background

Site Number:	XG	Contract Number:	EP-S2-10-03
D.O. Number:	0037	Action Memo Date:	7/15/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	8/22/2011	Start Date:	8/22/2011
Demob Date:		Completion Date:	
CERCLIS ID:	NYN000205895	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Removal Action

1.1.2 Site Description

See POLREPs 1 through 12 for more complete Site description.

The former R.N. Hitchcock Electroplating Facility (Site) is located at 58 Green Street in Port Byron, New York. The Site conducted electroplating and metal-finishing activities at the facility from 1946 until 2003.

The Site includes a 1.0-acre parcel that contains a 2-story wooden structure attached to the single story former metals plating and finishing concrete block structure (approximately 7,100 square feet gross floor area).

1.1.2.1 Location

The Site is located in a residential neighborhood at 58 Green Street in the Village of Port Byron, Cayuga County, New York 13140. The former metals plating and finishing facility is currently separated from the owner's personal home by a paved driveway.

The Site is bounded to the north, west and east by private residences, to the south and east (250 feet) by the Port Byron public school grounds, Port Byron/Town of Mentz Library and administrative buildings, and immediately adjacent to the Owasco Lake Outlet to the east (15 feet). To the southeast is the Village of Port Byron. The New York State Thruway is less than 250 yards to the north. The Port Byron Middle School and the AA Gates Elementary School are located less than one half mile to the east of the Site.

1.1.2.2 Description of Threat

Between October 2006 and February 2007, EPA conducted a removal of plating materials from the facility including vats and drums containing corrosive plating solutions, acids, cyanides, and heavy metals including cadmium, chromium, copper, lead, nickel and zinc.

In September, 2010, EPA conducted a comprehensive site assessment at the Site to assess the remaining potential contamination at the Site. This assessment focused on the building materials and the soil, groundwater and sediment

in the vicinity of the building.

Sampling revealed the presence of elevated levels of trichloroethylene (TCE) and its degrading byproducts in groundwater near the facility. This chemical was typically used for metal degreasing. The results also indicated the building materials are contaminated with heavy metals including chromium, hexavalent chromium, and cadmium. These metals were used in the electroplating process.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The EPA conducted site assessment activities between September 20 and September 24, 2010. Site activities included soil/dust/sweep sampling, surface and subsurface soil sampling (soil borings), sub-slab soil sampling, groundwater sampling, concrete core sampling, sediment sampling, asbestos sampling, wipe and wood core sampling.

Results from all media show total chromium and cadmium detected, with maximum concentrations occurring within the building and elevated levels outside of the building. Migration of these contaminants was traced to surface and sub-surface soils, groundwater and sediment samples within the Owasco Lake Outlet.

Samples of the concrete in the process area on the first floor (floors and walls) revealed elevated levels of hexavalent chromium, chromium, cadmium and lead. Three of these samples failed Toxic Characteristic Leaching Procedure test (TCLP) for chromium and six failed for cadmium, displaying the characteristic of Toxicity as defined in 40 CFR, Subpart C, 261.24 of RCRA. Soil sweep/dust throughout the building is contaminated with chromium, cadmium and lead. Exterior structure sampling revealed the presence of metals, including hexavalent chromium and total chromium in wall concrete.

Samples at the Site revealed the presence of metals in soils immediately adjacent to the plating section of the building. These metals included hexavalent chromium, total chromium, total cadmium and lead. Additionally, sediment samples in the Owasco Lake Outlet revealed detected levels of chromium, cadmium and lead.

Metals were also detected in groundwater samples collected between the plating section of the building and the outlet, including chromium and cadmium.

Samples collected between the plating section of the building and the outlet, as well as those collected from under the building show elevated levels for chlorinated solvents including cis-1,2 DCE, trans-1,2 dichloroethene (trans-1,2 DCE), 1,1 dichloroethene (DCE), vinyl chloride, TCE, and tetrachloroethene (PCE). Groundwater samples collected revealed the presence of cis-1,2 DCE, TCE, vinyl chloride, trans-1,2 DCE and 1,1 DCE at elevated levels. Soil samples collected below the concrete structure, in exterior surface soils and in soil borings also detected TCE. Water collected from the settling tank and sump that feeds the tank inside the building revealed cis-1,2 DCE, TCE and vinyl chloride.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

EPA is currently conducting a removal action to address the building materials contaminated with heavy metals. This action will include the removal of contaminated materials, including a partial building demolition, and further assessment and removal of contamination within the soils at the Site. Site operations commenced on August 22, 2011 and removal activities are expected to continue through November 2011.

2.1.2 Response Actions to Date

Refer to POLREPs 1 through 12 for operations prior to this reporting period.

October 24 through November 4, 2011:

Currently, the crew has removed the concrete slab, foundation, footer sections of the building footprint, as well as the concrete sections of the pits, settling tank and pump house/outfall area. The concrete recovered from these areas has been contaminated with cadmium, chromium and traces of cyanide wastes. Disposal of contaminated concrete was completed during the week of October 24, 2011. Nine (9) loads, approximately 22 tons each, totaling 198 tons were removed and sent to Envirosafe Services of Ohio, Inc., Oregon, OH.

Manifests: 007675325, 007675326, 007675327, 007675328, 007675329, 007675330, 007675331, 007675332, 007675333, 007675334.

Soil below the concrete sections and on the east side of the building footprint have revealed areas of staining, as well as a well defined cross-sectional vein of green material at varying depths as deep as 10 feet. Some of these green/stained sections of soil are up to 2.5 feet thick. Soils have been staged on-Site, and TCLP results for the soils show elevated cadmium levels (above 1.0 ug/L). Nine (9) loads, approximately 22 tons (20 cubic yards) each, totaling 198 tons (180 cubic yards) were removed from Site and sent to Envirosafe Services of Ohio, Inc. As many as 50 loads of metals contaminated soil remain on-Site and load out is ongoing.

Manifests: 007675406, 007675407, 007675408, 007675409, 007675410, 007675411, 007675412, 007675413, 007675414.

Excavated areas, depth varying from 2-10+ feet below original grade, have been gridded and sampled by RST personnel. Samples are collected after screening with XRF in the field.

Excavation activities uncovered three steel 55-gallon drums on the east side of the building. These drums were piped together, had perforation holes and were surrounded by stone fill. The drums showed signs of contamination, as did the surrounding material. Readings on the MultiRAE revealed low level VOCs in the recovery area. This area was unknown prior to the excavation and is a possible source of the chlorinated solvent contamination in the soils. Excavated soils from this area will be further segregated and extent of contamination samples will be collected once the area is fully accessible. UPDATE: An area adjacent to the drums was uncovered and elevated levels of VOCs (up to 143 ppm on MultiRAE). The area was immediately covered with soil to prevent the continued release of VOCs into the environment. USEPA called ERT and SERAS personnel were deployed to conduct air sampling in effort to identify the contaminants being released. SUMMA samples (grab) for VOCs were collected at the excavation (area was exposed during sampling)

on October 28, 2011. Preliminary results indicated the presence of TCE, cis-1,2 DCE, Vinyl Chloride and 1,1,1 TCA.

RST also collected soil samples from the VOC contaminated area. Preliminary VOC results indicated the presence of PCE, trans-1,2 DCE, 1,1 DCE, cis-1,2 DCE, TCE, 1,1,1 TCA, and Vinyl Chloride.

The VOC contaminated area is currently covered and isolated from other activities and waste streams. Treatment and disposal options are currently being investigated.

Over 280 cubic yards of construction and demolition debris have been removed from the Site. Waste is being separated based on sampling conducted during the Site Assessment phase and recent TCLP analysis. Steel recovered from the Site was recycled at no cost to the government.

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

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Hazardous Soil	Soil	~198 Tons	007675406, 007675407, 007675408, 007675409, 007675410, 007675411, 007675412, 007675413, 007675414		
Hazardous Concrete/C&D	Debris	~198 Tons	007675325, 007675326, 007675327, 007675328, 007675329, 007675330, 007675331, 007675332, 00767533, 00767534		
Asbestos (ACM)	Debris	<70cubic yards	(40yd) 001352417 (30yd) 002818306	Wrapped	
Non-Haz	Debris	240 cubic yards			
Recycled Metals	Metals	20 cubic yard			

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

This removal action will continue to address the excavation and off-site disposal of TCE/VOC contaminated soils exceeding the EPA removal action level of 280 mg/kg. The areas of concern were delineated in 2010 during ERT/SERAS sampling which was conducted at the Site. Further soil sampling will be conducted by RST personnel, as soil is excavated under the building footprint and to the eastern side of the building. The excavation of contaminated soils will proceed based upon the 2010 data and the additional October 28, 2011 sampling, with contaminated soils (> 280 mg/kg) being stockpiled for disposal. When the excavation has reached the maximum horizontal and vertical extent of contamination as delineated by SERAS and RST sampling, post-excavation samples will be collected to confirm that the excavation has reached the required cleanup goal prior to backfilling.

During soil removal activities, air monitoring is being conducted by RST to ensure that there is no off-site migration of contaminants (weather permitting). AreaRAE units will be deployed during the excavation and treatment of the VOC contaminated soils. The area will be tented, VOC vapors will be pumped through a carbon scrubber system, and soils will be treated prior to disposal. Work expected to commence during the week of November 7, 2011.

Sections of the south wall, south wall foundation, and eastern wall foundation will be repaired, beginning November 8, 2011. Excavation of soils will continue and T&D of excavated soils will be on-going. Backfill is currently staged on-Site and areas screened with the XRF and sampled have been backfilled, when appropriate.

2.2.1.2 Next Steps

Construction and demolition wastes will continue to be separated based on sampling results, and sent for disposal.

Treat and dispose of VOC contaminated soils.

EPA will attend public meetings at the Town of Mentz and Village of Port Byron to discuss progress at the Site.

2.2.2 Issues

Water intrusion in excavation areas has been a persistent issue. A request to the City of Auburn to limit the flow on the Owasca Lake Outlet was made during the week of October 31, 2011. The Outlet will be slowly lowered during the week on November 7, 2011. Further excavation will continue as the water levels drop and intrusion becomes less of an issue.

The normal seasonal flow will be resumed by Friday, 11, 2011.

Soil T&D has been slowed due to the availability of trucking. Flood recovery work and other environmental projects have contributed to the shortage.

2.3 Logistics Section

A tented area will be created over the VOC area and a carbon scrubber will be created to capture vapors. The soils will be treated in place and sent for disposal.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

Daily safety meetings are being conducted.

2.6 Liaison Officer

2.7 Information Officer

2.7.1 Public Information Officer

2.7.2 Community Involvement Coordinator

3. Participating Entities

No information available at this time.

4. Personnel On Site

1 - RST

5 - ERRS

1 - Field Cost Accountant

1 - Response Manager

2 - Technicians

1 - Equipment Operator

1 - EPA OSC

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.