

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region II

**Subject:** POLREP #12  
R.N.Hitchcock Electroplating Facility  
XG  
Port Byron, NY  
Latitude: 43.0383000 Longitude: -76.6286000

**To:**  
**From:** Michael Hoppe OSC  
**Date:** 10/20/2011  
**Reporting Period:**

## 1. Introduction

### 1.1 Background

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

#### 1.1.1 Incident Category

Removal Action

#### 1.1.2 Site Description

See POLREPs 1 through 11 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 11 for operations prior to this reporting period.

#### **October 17, 2011 Week:**

Currently, the crew has removed most of 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. As the concrete sections have been removed, any cracks, piped sections, seams or compromised sections allowed spilled plating process wastes to permeate into the concrete and into the soils below. Cross sections of the concrete have revealed areas of green, yellow, purple and orange staining. Disposal of contaminated concrete is anticipated for the week of October 24, 2011.

Soil below the concrete sections have revealed areas of staining, as well as a well defined cross-sectional vein of green material at varying depths on the eastern most sections of the excavation. Soils have been staged based on area of excavation and sampled. TCLP results for VOCs, Metals and SVOCs are expected during the week of October 24, 2011. These results will supplement the results already collected, which revealed elevated TCE, cyanide, cadmium and chromium levels.

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.

Crews worked in the area containing the historic mill wheels, removing contaminated soils, debris and concrete. Contaminated foundation walls were partially removed and other contaminated areas had the surface contamination chipped with hammer drills. Approximately 50 yard of soils, fill and concrete material

was removed from this area.

Oil stained areas of soil have been identified in the mill wheel section and adjacent to the settling tank. This oil is likely from oil coated timbers found that were part of the mill area foundation.

The south wall of the historic section of the mill has had the contaminated sections removed, including lower sections of the exterior wall, the 12"x12" lumber footer and poured concrete surface adjacent to the footer. The footer section and exterior wall will be repaired once bids are awarded.

A professional engineer (PE) inspected the historic icehouse, the south wall of the mill and mill wheel section for potential structural issues. The icehouse was determined to require only minor refacing and the mill building only requires repair of the removed footer sections and minor refacing. No immediate structural issues were identified at the time of inspection.

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

<b>Waste Stream</b>	<b>Medium</b>	<b>Quantity</b>	<b>Manifest #</b>	<b>Treatment</b>	<b>Disposal</b>
<b>Asbestos (ACM)</b>	<b>Debris</b>	<b>&lt;70cubic yards</b>	<b>(40yd) 001352417 (30yd) 002818306</b>	<b>Wrapped</b>	
<b>Non-Haz</b>	<b>Debris</b>	<b>240 cubic yards</b>			
<b>Recycled Metals</b>	<b>Metals</b>	<b>20 cubic yard</b>			

## 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 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 any additional 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 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).

Sections of the south wall, south wall foundation, and eastern wall foundation will be repaired. Excavation of soils will continue and T&D of excavated soils and concrete will be on going. Backfill will be staged and utilized as sample results are obtained for excavation area.

#### 2.2.1.2 Next Steps

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

Additional sampling of the soils below the footprint of the building and around the settling tank is anticipated during the week of October 24, 2011. Contaminated soil will be stockpiled for disposal.

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

Disposal of hazardous concrete was delayed. Additional analysis was required by the disposal facility. TCLP VOC, SVOC and Reactive Cyanide samples were collected. Results are expected during the week of October 24, 2011 and will dictate if the waste will require any additional handling at the approved facility.

Waste oils in some recovered soils might require modification to disposal bids or require rebids.

Building was inspected by a PE to ensure that it was structurally sound and ready for repair work to commence.

### **2.3 Logistics Section**

Mini-excavator and skid steer were mobilized to the site.

### **2.4 Finance Section**

No information available at this time.

### **2.5 Other Command Staff**

#### **2.5.1 Safety Officer**

Demolition and load-out activity safety is discussed daily.

#### **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.