



United States Environmental Protection Agency  
Region 10 Emergency Response Unit  
**POLLUTION REPORT**

**I. HEADING**

Date: September 22, 2001  
Subject: Industrial Chrome Plating  
From: Dan Heister, OSC, USEPA, Region 10, Emergency Response Unit  
Tel: Office (503) 326-6869  
TO: See Distribution List on last page

**POLREP No.4**

**II. BACKGROUND**

Site ID: 8P  
Delivery Order No: E-01-001  
Response Authority: CERCLA  
FPN No: 987175064  
NPL Status: NA  
State Notification: Oregon Department of Environmental Quality  
Action Memo Status: August 2001  
Removal Start Date: August 27, 2001  
Expected Completion Date: October 20, 2001

**III. SITE INFORMATION**

**A. Incident Category**

Fund-Lead Removal Action

**B. Site Description**

**1. Site Location**

The Industrial Chrome Plating site is located in a mostly residential neighborhood on the southeast corner of NE 62<sup>nd</sup> Avenue and NE Hassalo Street in Portland, Oregon. The Portland Rifle Club and Deluxe Fuel are west of the site; an empty lot is to the east. The southern boundary of the property borders the City of Portland's Tri-Met transportation railroad track and Interstate Highway 84, which are in a swale known as Sullivan Gulch.

The site consists of a main building and an outside storage area on 0.27 acres. A storage lot to the east of the property (with cars and trailers) that has been impacted by the facility's operations is an additional quarter acre. The main building is separated into two parts: the northern portion and the southern portion. Most of the plating tanks are in the northern portion, while the southern portion contains a few smaller plating tanks and an area set aside for buffing and polishing parts. A small office is in the northwest corner of the building. The south side of the property has an asphalt driveway, a small patch of grass, and a large cellular communications tower. The southern portion of the property is fenced. Immediately south of the fence the terrain slopes steeply down for 15 to 20 feet into Sullivan Gulch and railroad tracks. Runoff water from the site flows to the gulch and railroad tracks, and access is unrestricted. The empty lot to the east of the site is fully fenced and contains a large advertisement billboard, and some parked trailers and boats. The east property boundary is fenced at the south end of the property and the building wall makes up the north end. Areas of gravel and broken asphalt make up a ten foot wide strip between the property and NE 62<sup>nd</sup> Avenue. On the west side of 62<sup>nd</sup> Avenue is the Portland Gun Club to the north and Deluxe Fuel to the south. North of the site is a residential neighborhood. Three houses are located directly across the street and one on the opposite corner of NE Hassalo and NE 62<sup>nd</sup> Avenue.

### **C. Assessment Results**

In March of 1999, the EPA tasked Ecology and Environment Inc. (E & E) Superfund Technical Assessment and Response Team (START), to assess the risks associated with the Industrial Chrome Site. An integrated assessment of the site was conducted which identified elevated concentrations of chromium and lead at depth and in the surface of a majority of the samples. Based on the analytical results from this sampling event, the EPA tasked Ecology and Environment, Inc. to conduct a removal assessment at the ICP site to determine the full extent of surface and subsurface contamination both on and surrounding the ICP property.

Removal assessment results indicated the presence of hexavalent chromium in the surface soil contamination on the south and east sides of the building. Subsurface soil contamination is concentrated in the first ten feet on the south and east sides of the building. However, in the vicinity of the dry well (southeast of the building), significant subsurface soil contamination extends to a depth of at least 30 feet bgs, and subsurface soil. Subsurface soil samples collected from beneath the building also contained significant levels of contamination. Assessment of subsurface

contamination west and south of the buildings was incomplete because overhead and subsurface utilities interfered with access to this area.

Many detections of lead in samples collected on the ICP property exceed Region 9 Preliminary Remediation Goals and/or Oregon Cleanup Levels.

Six people worked at the site until it voluntarily ceased operations in August 2001. The site is located in a mixed commercial/industrial and residential neighborhood with homes as little as 100 feet from the property to the north. Access to the site is not completely restricted, thereby increasing the potential for humans and animals to come in contact with contaminants. Soils to the south and east of the ICP building are fenced, preventing access to the area. Some of this area is capped with grass or asphalt; however, most of the contaminated area is exposed soil. Access to contaminated soils on the north and west side of the building is unrestricted. Soils on surrounding residential properties do not contain chromium above regulatory levels.

The possibility for off-site migration of chromium and lead, specifically via direct exposure to soil, particulates, surface water runoff, and groundwater can be reduced only if contaminated surface and subsurface soils at the site are removed or immobilized.

In August 2001, EPA obligated funds to conduct a removal of the soil contamination at the Industrial Chrome site which will involve: razing the building; excavating and properly disposing of contaminated soil and debris; and restoring the property so that it may be used in the future.

#### **IV. Removal Activities**

##### **A. Situation**

##### **1. Current Situation**

September 17, 2001 (Monday)

Personnel on site: START (2), ERRS (5), EPA(1), USCG(1).

Weather: Partly cloudy with a high in the mid-70s expected.

START conducts air sampling around the perimeter of the site to monitor the off-site migration of airborne particulate matter potentially laden with metals contamination. EQM begins to excavate along the western boundary of the site at a 1 to 1.5 foot slope (1 foot of depth for every 1.5

feet in lateral distance). This is the maximum slope recommended without the use of shoring.

Three representative from Qwest wireless visit the site and relay that a depth of 4 feet may be excavated at a distance of 5 feet from the cell tower and then a 1 to 1.5 slope may commence at that 5 foot radius. A request is made of David Rummell (with Qwest) to provide a letter stating the allowable excavation in proximity to the cell tower.

Excavated soils from the western boundary are stockpiled by ERRS on the eastern portion of the property. Plastic is laid beneath the pile.

September 18, 2001 (Tuesday)

Personnel on site: START(3), EPA(1), EQM (5), USCG (1).

Weather: Clear skies with a high of 80° F expected.

START continues to operate air monitoring network. AK Media loads out the concrete post which supported the billboard next to the building. Contaminated concrete was chipped from the post on Monday. The post will be replaced after contaminated soils have been removed from the property.

Analytical results (TCLP metals) for three stockpiles (SP0200, SP0300, and SP0400) were received indicating that the material could be transported to a RCRA subtitle D landfill.

Two loads of concrete debris and two loads of soil are transported to the Waste Management Hillsboro Landfill for disposal.

September 19, 2001 (Wednesday)

Personnel on site: START (2), EQM (5), EPA (1), USCG (1).

Weather: Partly cloudy skies with a of 82°F expected.

Air monitoring network of six samplers at five locations is operated by START. ERRS crew loads four trucks for transport to the Waste Management Hillsboro landfill.

Representatives from Pacific Power arrive at the site. They state that excavation may commence at a distance of 5 feet from the base of the power poles (along both 62<sup>nd</sup> Street and Hassalo Street) and continue at the same gradient accepted by Qwest (1 foot vertical to 1.5 feet lateral). They also relay that a foot of surface soil may be removed around the power poles.

September 20, 2001 (Thursday)

Personnel on site: START(2), EPA (1), USCG(1), EQM (5).

Weather: Clear skies with a high in the mid 70s expected.

EQM crew excavates additional soils along the western portion of the property. Analytical results are received for stockpile (SP0500) which was excavated from the western portion of the site. The material failed the TCLP test for metals and will be shipped to the U.S. Ecology of Idaho (USEI) Subtitle C landfill in Grand View, Idaho.

Contaminated soil and concrete (with visible chromium stains) is loaded into five trucks for transport to USEI. These are the first loads to be shipped to the Subtitle C facility. The concrete (foundation of the plating facility) and soils (immediately beneath the foundation) were segregated on the western edge of the site and covered.

September 21, 2001 (Friday)

Personnel on site: EQM (6), START (3), USCG(1).

Weather: Sunny skies with a high in the upper 70s expected.

Excavation around the cell tower commences with a foot of soil being removed. A small (mini-excavator) is utilized for this activity due to the buried utility lines supplying the Qwest cell tower. Analytical data for subsurface soil samples collected near the tower indicated that contamination decreases significantly five feet below ground surface. Additional screening of soils will be conducted with the XRF after the first foot of soil is excavated and stockpiled.

Two loads of soil are transported to the Waste Management Landfill in Hillsboro, Oregon. This material was excavated from the southern edge of the property where chromium exceeded the action level, but the material passed the TCLP test.

**2. Removal Actions to Date**

Several loads of contaminated concrete and soil were delivered to a RCRA Subtitle D landfill in Hillsboro, Oregon, and Subtitle C landfill in Grand View, Idaho. No material was transported off-site on Monday, September 17, 2001.

**September 18, 2001**

Type	Quantity	Location Where Taken
Concrete	2 truck loads	Waste Management (Hillsboro, Oregon)

Type	Quantity	Location Where Taken
Soil	2 truckloads	Waste Management (Hillsboro, Oregon)

**September 19, 2001**

Type	Quantity	Location Where Taken
Soil	4 truckloads	Waste Management (Hillsboro, Oregon)

**September 20, 2001**

Type	Quantity	Location Where Taken
Soil	2 truckloads	U.S. Ecology of Idaho (USEI)
Concrete	3 truckloads	

**September 21, 2001**

Type	Quantity	Location Where Taken
Soil	2 truckloads	Waste Management (Hillsboro, Oregon)

**3. Enforcement**

Enforcement actions are being reviewed at this time by EPA.

**B. Planned Removal Activities**

The removal action will involve the excavation of the majority of soil contamination at the site.

Clean backfill will replace the excavated soils and an asphalt cap will aid in directing water away from the site soils. In addition, a plastic barrier layer may be placed in the subsurface to preclude the migration of any remaining contamination.

### **C. Next Steps**

EPA and E&E to continue to conduct soil sampling, air sampling, X-Ray Fluorescence metals screening, submittal of confirmation samples, and site documentation for the removal action until completion.

### **V. Cost Information**

Estimated costs are summarized below:

	Established Ceiling	Estimated Costs (as of 9/22/01)
EPA	\$ 37,000	\$6,500
START	\$180,000	\$68,000
ERRS	\$400,000	\$288,000
Total	\$517,000	\$350,500

*Note: The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. 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.*

### **VI Disposition of Wastes**

Contaminated soil has been transported to the Waste Management Hillsboro Landfill in Hillsboro, Oregon, and the U.S. Ecology of Idaho facility in Grand View, Idaho. Additional disposal facilities may be utilized to remove all of the wastes. Hazardous liquid wastes and building debris were removed from the site during the first two weeks of the removal action.

### **VII Distribution**

To: Terry Eby, EPA Headquarters  
Chris Field, Mary Matthews, OSCs, EPA Region 10 Emergency Response Unit  
Oregon Department of Environmental Quality, Attention: Chuck Donaldson,  
Emergency Response  
EPA Oregon Office, Attention: Dan Opalski

### **VII Status**

Site actions continue.