



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

I. HEADING

Date: September 29, 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.5

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 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 62nd 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 62nd Avenue. On the west side of 62nd 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 62nd 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 24, 2001 (Monday)

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

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

ERRS continues 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. Much of the material previously excavated with TCLP results exceeding regulatory standards is loaded and transported to U.S. Ecology of Idaho

(USEI). Six trucks are loaded with material from beneath the facility which failed the TCLP test. Two loads are transported to the Waste Management Hillsboro landfill for disposal as a non-hazardous waste.

Additional excavated soils from the western boundary are stockpiled by ERRS on the eastern portion of the property. Plastic is laid beneath the piles.

September 25, 2001 (Tuesday)

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

Weather: Light rain with a high of 70° F expected.

Excavation today includes the area in proximity to the Qwest Cellular tower. As discussed with Qwest, a five foot berth will be left around the tower before a gradient of 1 foot vertical to 1.5 feet lateral is initiated. ERRS will also remove one foot of surface soils around the cell tower which appear to have been impacted by airborne migration of contaminants.

Four loads of soil are loaded for transport to USEI. These soils were excavated from beneath the facility.

September 26, 2001 (Wednesday)

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

Weather: Light rain with a high of 68°F expected.

Silt fence is placed around the excavation area (the facility and the adjoining lot to the east) to prevent migration of contaminants due to the rain.

Several piles are screened with the XRF to determine whether they will likely be special waste (passing TCLP but above action levels) or hazardous waste (failing TCLP). Results of the XRF screening indicate that the soils will likely fail the TCLP analysis based on past XRF screening for total lead and chromium. Six loads of hazardous wastes are transported to the USEI facility for treatment and disposal.

The possibility of a plastic liner installed beneath the site is discussed. Although the liner may provide an additional barrier in preventing water from transporting contaminants, the asphalt cap (if installed properly) should be a sufficient barrier to precipitation affecting the site. The liner would likely be a secondary barrier that would prevent water flow through the site should the asphalt cap be compromised due to a catastrophic event.

September 27, 2001 (Thursday)

Personnel on site: START(1), EPA (1), USCG(1), EQM (6).
Weather: Clear skies with a high in the upper 50s expected.

OSC and START speak with Deluxe Fuel, the property owners west of the site who may purchase the property, to determine the weight of their trucks and the load per axle. This will aid the E & E engineers in determining the proper thickness and slope for the base gravel and asphalt cap. The design and specifications for the cap will be completed by E & E engineers by Monday of the following week.

Two trucks are loaded with hazardous waste for transport to USEI. ERRS has attempted to obtain additional trucks for transport of material to USEI, but has had difficulty obligating the trucks.

September 28, 2001 (Friday)

Personnel on site: EQM (6), START (1), EPA (1), USCG(1).
Weather: Sunny skies with a high of 68°F expected.

High levels of contamination are visually observed near the cellular tower in surface soils. Screening with the XRF indicates chromium levels exceed 5 percent in some of the material. Qwest is notified by the OSC that excavation around the tower will likely be close to the utility lines and telephone lines supplying the tower due to the high levels of contamination in that area. Qwest will have representatives at the site on Monday, October 1st.

Soils failing TCLP are loaded onto four trucks for transport to USEI for stabilization and disposal.

2. Removal Actions to Date

Several loads of contaminated soil were delivered to a RCRA Subtitle D landfill in Hillsboro, Oregon, and Subtitle C landfill in Grand View, Idaho.

September 24, 2001

Type	Quantity	Location Where Taken
Soil	2 truckloads	Waste Management (Hillsboro, Oregon)
Soil	6 truckloads	U.S. Ecology of Idaho (Grand View, Idaho)

September 25, 2001

Type	Quantity	Location Where Taken
Soil	4 truckloads	U.S. Ecology of Idaho (Grand View, Idaho)

September 26, 2001

Type	Quantity	Location Where Taken
Soil	6 truckloads	U.S. Ecology of Idaho (USEI) (Grand View, Idaho)

September 27, 2001

Type	Quantity	Location Where Taken
Soil	2 truckloads	U.S. Ecology of Idaho (USEI) (Grand View, Idaho)

September 28, 2001

Type	Quantity	Location Where Taken
Soil	4 truckloads	U.S. Ecology of Idaho (USEI) (Grand View, Idaho)

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

e 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	\$10,000
START	\$180,000	\$72,000
ERRS	\$400,000	\$356,000
Total	\$617,000	\$ 438,000

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. Some solvents (acetone) remain in six 55-gallon drums awaiting proper disposal.

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.