



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

I. HEADING

Date: October 20, 2001
Subject: Industrial Chrome Plating
From: Dan Heister, OSC, USEPA, Region 10, Emergency Response Unit
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TO: See Distribution List on last page

POLREP No.8

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: November 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

October 15, 2001 (Monday)

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

Weather: Clear skies with a high of 75°F expected.

After consultation with EPA and START, the ERRS contractor began to remove contaminated material from the landfill area in the eastern lot. An excavation pit of 5 feet bgs is achieved by the end of the day. Eight loads of contaminated soil/debris are loaded for transport to USEI.

A representative from Amec Earth & Environment, Inc., arrives at the site to conduct the compaction test for the second lift of backfill (approximately 16 feet bgs) being placed in the excavation pit beneath the former plating facility (west lot). Two tests are conducted for this lift and both are above 95% of the maximum dry density. Moisture content continues to be below the optimal moisture level of 8% but the results are acceptable. Additional water will be added to the backfill as it is compacted.

Twenty-one loads of backfill are brought to the site today with an approximate weight of 708 tons.

October 16, 2001 (Tuesday)

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

Weather: Cloudy skies with a high in the lower 60s expected.

START conducts screening of soils around the excavation pit in the landfill area. A northern, eastern, and western boundary of chromium contamination have been identified through the use of the XRF instrument. The ERRS crew excavates contaminated material beneath the landfill to a depth of 15 feet bgs due to the vertical migration of the contaminants through the soils.

Three loads of backfill are delivered to the site (97 tons) and thirteen loads of stockpiled contaminated material are loaded for transport to USEI.

October 17, 2001 (Wednesday)

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

Weather: Partly cloudy with a high in the mid-50s expected.

START continues to screen soils with the XRF in the eastern lot and relays the information to ERRS. Another smaller pit will be excavated in the eastern lot south of the landfill pit. The smaller pit contains contaminated soils that surrounded the second dry septic well which was identified the previous week. Although the areal extent of contamination is not as large as beneath the plating facility or the landfill, the depth of contamination is nearly the same (12 feet).

Additional screening with the XRF also indicates the southern edge of the site (which has not been excavated) will need 4 to 6 feet of contaminated soil removed.

October 18, 2001 (Thursday)

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

Weather: Cloudy skies with a high in the mid-50s expected.

START prepares seven confirmation soil samples from the eastern RV lot that have been screened with the XRF to be analyzed at a fixed laboratory for lead, chromium and hexavalent chromium. ERRS crew has completed removal of soils from the eastern lot, and they lay a fabric in the base of the pits which aids in the compaction of the backfill but still allows water to pass through it. Six loads of backfill are transported to the site today with a total weight of approximately 198 tons.

Southeast edge of the site is excavated to a depth of 5 feet bgs. The southwest corner will not be removed until all the stockpiled soils are loaded.

October 19, 2001 (Friday)

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

Weather: Cloudy skies with a high in the upper 50s expected.

First lift (1 to 1.5 feet) of backfill is compacted in the eastern lot pits. A representative from Amec Earth & Environment, Inc., conducts two density tests at the site which finds the material to be compacted at 90% and 91% of the maximum dry density. This will be acceptable for the first lift of backfill. ERRS begins to compact the next lift of backfill material in the eastern and western lots.

The crew will load out the remaining stockpiled contaminated soil on Monday into three trucks for transport to USEI. Three trucks were loaded today as well.

2. Removal Actions to Date

Contaminated soil was delivered this week to a RCRA Subtitle C landfill in Grand View, Idaho (US Ecology Idaho). No subtitle D material was transported during this week.

October 15, 2001

Type	Quantity	Location Where Taken
Soil	8 truckloads	U.S. Ecology of Idaho (Grand View, Idaho)

October 16, 2001

Type	Quantity	Location Where Taken
Soil	13 truckloads	U.S. Ecology of Idaho (Grand View, Idaho)

October 17, 2001

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

October 18, 2001

Type	Quantity	Location Where Taken
Soil	13 truckloads	U.S. Ecology of Idaho (USEI) (Grand View, Idaho)

October 19, 2001

Type	Quantity	Location Where Taken
Soil	3 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 the excavated soils and an impermeable asphalt cap will be installed to prevent precipitation from migrating through the site soils. The cap will also direct surface water away from the site to municipi

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 10/13/01)
EPA	\$37,000	\$22,000
START	\$180,000	\$100,000
ERRS	\$1,200,000	\$950,000
Total	\$1,417,000	\$1,072,000

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. The liquids were transported to Burlington Environmental in Tacoma, Washington for proper disposal. The building debris was delivered to the Roosevelt Regional Landfill in Roosevelt, Washington. Some solvents (acetone) remain in six 55-gallon drums awaiting proper disposal.

VII Distribution

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Oregon Department of Environmental Quality, Attention: Chuck Donaldson,
Emergency Response
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VII Status

Site actions continue.