STATEMENT OF BASIS/FINAL DECISION AND RESPONSE TO COMMENTS SUMMARY

REGION X
ID# 2010

Arnav Systems, Inc.

Salem, OR
(Signed May 10, 1991)

Facility/Unit Type: Plating operations
Contaminants: Lead, Chromium, Barium, Cadmium, Copper, Zinc
Media: Soil
Remedy: Excavation

FACILITY DESCRIPTION

In November 1990, Arnav Systems, Inc. discovered an unlined earthen sump inside a building on site. Clean closure of a nearby regulated surface impoundment was made contingent on remediation of the sump, which was thought to contain electroplating waste residue.

Arnav Systems, formerly known as Morrow Electronics, Inc., manufactured aircraft navigation equipment and fuel management computers. Materials known to have been handled on site that may have been deposited in the sump include EPA listed electroplating wastes, and wastes characteristically hazardous for lead, chromium and corrosivity.

The site is located in an industrially zoned area. The nearest residential area is a narrow strip of eight residences located 1.4 miles northwest of the site.

The site is underlain by silty clays to a depth of 7 feet. Beneath these clays are 15 to 30 feet of brown silt, a thin layer of silty sand, and gravels which extend to a depth of 100 feet. Depth to ground water is 25 feet below ground surface. Residential and industrial properties located downgradient from the site use ground water from the shallow unconfined aquifer for domestic and industrial uses.

After conducting one year of ground water sampling, it was determined that ground water quality beneath the site was unaffected by the waste in the closed surface impoundment and the sump. The surface impoundment clean closure was completed in October 1991. Remediation of the sump was completed in April 1993.

EXPOSURE PATHWAYS

Exposure pathways include contact or ingestion of soil remaining in the sump area after removal of the waste. An endangerment assessment for human health performed for the nearby surface impoundment indicates that the level of risk posed by this exposure pathway is very low. The nearest residential area is located 1.4 miles northwest of the site.

SELECTED REMEDY

In 1993, waste residue present in the sump and surrounding contaminated soils were excavated. Soil samples taken from the walls of the excavation revealed that cleanup goals were met for all parameters. Excavated material was disposed of at an approved hazardous waste management facility.

INNOVATIVE TECHNOLOGIES CONSIDERED

None.

CONTAMINATION DETECTED AND CLEANUP GOALS

Media	Estimated Volume	Contaminant	Maximum Concentration (ppm)	Action Level	Cleanup Goal (ppm)	Point of Compliance
soil	Not given	lead	2110	Not given	2000	Not given
		chromium	508		400	
		barium	921		4000	
		cadmium	8.1		40	
		copper	10800		80000	
		zinc	167		162	

PUBLIC PARTICIPATION

The Oregon Department of Environmental Quality requested public comments from May 27, 1993, until July 12, 1993. No comments regarding the sump were received. No requests for a public hearing were submitted, and a public hearing was not held.

NEXT STEPS

Remediation of the sump was completed and no further action is required.

KEY WORDS

soil; dermal contact, ingestion (soil); inorganics/heavy metals, lead, chromium, cadmium; excavation

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