STATEMENT OF BASIS/FINAL DECISION AND RESPONSE TO COMMENTS SUMMARY

REGION X
ID# 1187

Permapost Products Company

Hillsboro, OR
(Signed July 21, 1989)

Facility/Unit Type:	**Disposal for wood treatment wastes**
Contaminants:	**Pentachlorophenol (PCP); copper-chrome-arsenate; Phenol; 2-Chlorophenol, 2,4-Dichlorophenol (DCP); 2,4,5-Trichlorophenol (TCP); 2,4,6-Trichlorophenol (Phenachlor); 2,3,4,6-Tetrachlorophenol; Arsenic; Chromium**
Media:	**Ground water**
Remedy:	**Ground water pump and treatment system with carbon absorption and ion exchange filtration, off-site treatment**

FACILITY DESCRIPTION

In July of 1989, a final post-closure permit was issued to Permapost Products Company (Permapost) for long-term care of closed hazardous waste surface impoundments. Corrective action conditions under the permit require ground-water remediation for releases from the impoundment and other Solid Waste Management Units (SWMUs) at the facility.

Permapost began operation in 1961 using a process of alternately applying a vacuum and pressure to wood to extract water and replace it with preservatives such as PCP, arsenic, and chromium. Contaminated wastewater generated by this process was stored in two surface impoundments. In November 1984, the surface impoundments were removed from service and replaced with two above-ground steel tanks. The impoundments were then closed as a hazardous waste landfill in accordance with state and federal standards. The legacy of twenty years use, however, resulted in a plume of contamination extending over an area approximately 400 feet long and 170 feet wide. Although the plume does not pose a threat to drinking water, some of the contaminants exceeded EPA's health-based standards and required corrective action.

The depth to ground water is approximately 5 feet. Ground water flows northeast from the facility. Nearly all of the contaminated plume is located off-site. Cemetery Lake and Rock Creek are the two nearest bodies of surface water. Neither body is a drinking water source and neither is used for recreation. The adjoining property is a cemetery.

EXPOSURE PATHWAYS

Potential for human exposure is low because ground water in the vicinity is not used as a drinking water source or for recreation. Potential for exposure to aquatic species is possible if the plume migrates. No sensitive environmental or endangered species are known.

SELECTED REMEDY

Permapost has installed a pump and treat system. Contaminated ground water is treated by filtration, ion exchange to remove the arsenic, and carbon absorption to remove organics. Spent carbon is treated off-site at a carbon regeneration facility.

CONTAMINATION DETECTED AND CLEANUP GOALS

Media	Estimated Volume	Contaminant	Maximum Concentration	Action Level	Cleanup Goal	Point of Compliance
ground water*		Phenol 2-Chlorophenol DCP TCP Phenachlor 2,3,4,6-Tetrachlorophenol PCP Arsenic			1.00 mg/l 0.01 mg/l 0.10 mg/l 4.00 mg/l 0.01 mg/l 1.00 mg/l 0.22 mg/l 0.05 mg/l	Wells P-10, P-11, P-11c, and P-21
surface water*		Phenol 2-Chlorophenol DCP TCP Phenachlor 2,3,4,6-Tetrachlorophenol PCP			1.00 mg/l 0.01 mg/l 0.10 mg/l 2.60 mg/l 0.01 mg/l 1.00 mg/l 0.05 mg/l	Cemetery Lake and Rock Creek

* All contaminants detected off-site.

INNOVATIVE TECHNOLOGIES CONSIDERED

The facility considered bioremediation, however, they chose the conventional pump and treat system.

PUBLIC PARTICIPATION

No significant comments were received during the public comment period and a public hearing was not held.

NEXT STEPS

Compliance with the performance standards for achieving adequate progress in the ground-water cleanup will be monitored through compliance inspections.

KEY WORDS
ground water; ingestion; organics, heavy metals; filtration, ion exchange, carbon absorption, off-site treatment

CONTACT
Jan Palumbo, HW-106
U. S. EPA, Region X
1200 6th Avenue
Seattle, WA 98101