STATEMENT OF BASIS/FINAL DECISION AND RESPONSE TO COMMENTS SUMMARY

REGION VIII
ID# 8294

Tooele Army Depot-North Area

Tooele, UT
(date not given)

Facility/Unit Type:	**Industrial waste lagoon**
Contaminants:	**Trichloroethylene (TCE); Benzene; Carbon Tetrachloride; Chloroform; Chromium; 2,4-Dimethylphenol; 1,1-Dichloroethane; 1,1-Dichloroethene; 1,2-Dichloropropane; Ethylbenzene; Methylene Chloride; Tetrachloroethane; Trichloroethane; Toluene; Xylenes**
Media:	**Ground water, soils**
Remedy:	**Capping and closing impoundment and ditches; pumping and treating ground water, collecting ground water by extraction wells and processing at the on-site ground-water treatment plant by air stripping; injecting "Clean" water into the aquifer at a downgradient location outside of the plume**

FACILITY DESCRIPTION

The Tooele facility is surrounded by land used for agricultural purposes and grazing. The Great Salt Lake is the only large downgradient body of surface water located nearby and some springs are located several miles from the plume. The Tooele facility is now a hazardous waste generator and has permit applications pending for storage and treatment of hazardous waste.

During previous closure activities, the industrial waste lagoon and ditches were capped. Not all of the contaminated material was removed from the lagoon, therefore, the site was closed as a landfill.

Ground water flows approximately 175 to 200 feet below the surface in an unconfined aquifer and is used as a drinking water source. Drinking water wells owned by the town of Grantsville, Utah are located several miles downgradient from the plume. In addition, numerous agriculture and stock watering wells are located near the facility in a downgradient direction.

In 1986, the Utah Division of Solid and Hazardous Waste (Utah DSHW) issued a state order to Tooele. The terms of the order required that Tooele determine the nature and extent of contamination from an industrial waste lagoon and associated conveyance ditches at the facility. Utah DSHW issued a post-closure permit to the Tooele Army Depot on January 7, 1991 pursuant to Section 3004(u) of RCRA. The permit required Tooele to monitor closed lagoon and evaluate cleanup alternatives to address groundwater contamination.

EXPOSURE PATHWAYS

Ground-water contamination has migrated approximately 1/4 mile off-site in a downgradient direction from the lagoon area. The nearest human receptors are the wells used in Grantsville.

SELECTED REMEDY

The selected remedy includes capping and closing the impoundment as a hazardous waste landfill. The closure was completed in late November 1988. Ground-water contamination will be addressed by 12 extraction wells, 2 air stripping towers, and 13 injection wells. The Army selected to close the impoundment in place because a clean closure was not possible in a cost effective manner.

The estimated capital cost to implement the remedy is expected to be approximately $16 million.

Implementation of the impoundment closure is complete. The ground-water treatment system

CONTAMINATION DETECTED AND CLEANUP GOALS

Media	Estimated Volume	Contaminant	Maximum Concentration	Action Level	Cleanup Goal	Point of Compliance
ground water	36 billion gallons	TCE	250 ppb	5 ppb	1 ppb	Vertical surface of downgradient boundary of impoundment

installation is underway and the expected date for project completion is December 13, 1993. Monitoring and cleanup will continue for 30 years or until the groundwater is cleaned to below health based standards.

Soils from drilling will be analyzed and managed appropriately.

INNOVATIVE TECHNOLOGIES CONSIDERED

None.

PUBLIC PARTICIPATION

A public meeting was held on November 13, 1990 in Salt Lake City and Tooele, Utah. Four comments were received; two from U.S. Army and two from U.S. EPA. The main issue at the meetings was how to manage the contaminated ground water generated from well development and testing. It was decided that a temporary lined holding pond would be constructed to manage the water until the water can be treated and injected back to the aquifer.

NEXT STEPS

The ground water will be sampled and analyzed to determine whether the selected remedy will achieve cleanup goals. In addition, the remaining 45 SWMUs at the facility are being investigated under RCRA and CERCLA. The base was listed on NPL on August 30, 1990. A federal facility agreement was signed on September 16, 1991. In that agreement, Tooele agreed to investigate 17 SWMUs under CERCLA and the remaining 28 under RCRA.

KEY WORDS

ground water; ingestion; VOCs, heavy metals; capping, air stripping, on-site treatment, reinjection

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