STATEMENT OF BASIS/FINAL DECISION AND RESPONSE TO COMMENTS SUMMARY

REGION X
ID# 0231

Tektronix, Inc.
BEAVERTON, OR
(Signed June 25, 1990)

Facility/Unit type: Develop, manufacture and service electronic instruments
Contaminants: Trichloroethylene (TCE), & other volatile organics
Media: Ground water
Remedy: Ground water extraction and treatment

FACILITY DESCRIPTION

In July of 1990, EPA and the Oregon Department of Environmental Quality issued a RCRA permit to Tektronix, Inc. (TEK) pursuant to Sections 3004(u) and (v) of RCRA and Chapter 340 of the Oregon Administrative Rules. The permit requires Tektronix to conduct corrective action for closed hazardous waste disposal units and other solid waste management units at its Beaverton, Oregon facility.

TEK develops, manufactures, and services a broad range of electronic measurement and control instruments. Hazardous wastes are generated as a result of research and development activities, degreasing and cleaning operations, and as by-products of manufacturing and the industrial waste-water pre-treatment plant. The Facility is located in an industrial area where the nearest residential area is located within 1/4 mile.

TCE has been found in the ground water in three separate areas. These areas are the sludge holding ponds, drum storage areas, and land application of sludge.

The facility is underlain by fill material due to past construction and landscaping activity. The fill ranges in depth from 1 to 13 feet. The clayey silt fill material is underlain by alluvium. The depth to ground water is approximately 10 feet. The uppermost aquifer extends to 45 feet, and consists of an upper unconfined unit and a lower semi-confined unit.

Beaverton Creek flows through the site, and an unnamed creek flows from the northeast into Beaverton Creek. These creeks are the primary receptors for surface drainage.

EXPOSURE PATHWAYS

Ground water is the primary contaminant migration pathway at the site, but the risk of exposure is minimal because beneficial uses are either upgradient or at some distance from the site. The presence of TCE in Beaverton Creek from upstream and site sources has been documented. The risk of exposure through surface water is limited to areas downgradient of the site. Residential areas are located 1/4 mile downstream of the Facility. Potential for exposure to contaminated subsurface soil is low because of limited access to soil, and the infrequency of excavation in contaminated areas. Potential for exposure to air emissions caused by the air stripping based water treatment system have been minimized through permit constraints.

SELECTED REMEDY

First implemented in January 1989, the ground-water recovery system is composed of ten recovery wells, two cutoff collars, and a central air stripper-based water treatment system. A cutoff collar was installed near the storm drain backfill beneath the Building 40 surface impoundment area

CONTAMINATION DETECTED AND CLEANUP GOALS

Media	Estimated Volume	Contaminant	Maximum Concentration (µg/l)	Action Level (ug/l)	Cleanup Goal* (µg/l)	Point of Compliance
ground water	Not given	TCE tetrachloroethene trans-1,2-dichloroethene 1,1,1-trichloroethane 1,2-dichloroethane	42,500 16,000 41 2,100 170	5 5 100 200 5	5 5 100 200 5	Not given

- Cleanup goals are Maximum Contaminant Levels that are federally enforceable under the Safe Drinking Water Act.

to stop flow from directly entering Beaverton Creek. The total capital and O&M costs are estimated to be $2.5 million (1986).

INNOVATIVE TECHNOLOGIES CONSIDERED

None.

PUBLIC PARTICIPATION

The public comment period began on March 8, 1990 and ended on April 23, 1990. A public hearing was not held because no request or inquiries were made about the hearing.

NEXT STEPS

EPA will continue to monitor the ground-water recovery system to ensure the effectiveness of the system.

KEY WORDS
ground water; ingestion; VOCs, TCE; air stripping, on-site treatment

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