STATEMENT OF BASIS/FINAL DECISION AND RESPONSE TO COMMENTS SUMMARY

REGION X
ID# 5182

BSB Diversified (Formerly Hytek Finishes Company)

Kent, WA
(Signed August 29, 1991)

Facility/Unit Type: Electroplating and metal finishing
Contaminants: Volatile organics, arsenic, cyanide
Media: Ground water
Remedy: Ground-water extraction and treatment

FACILITY DESCRIPTION

In November 1988, EPA and the Washington Department of Ecology issued a joint RCRA permit to Hytek Finishes Company pursuant to RCRA and the Washington Administrative Code. Corrective action conditions under the permit required ground-water remediation and long term monitoring.

BSB and its predecessor, Heath Plating, conducted metal finishing and electroplating operations at the site beginning in 1957. From 1964 through 1985, the facility generated metal plating wastes that were treated and stored in five unlined surface impoundments. Use of the impoundments was discontinued in 1985. The facility also used various chlorinated and nonchlorinated processing solvents which have contributed to ground-water contamination.

Ground water at the site is contaminated by arsenic, cyanide, and organic compounds. Contamination by organic compounds is believed to have originated from spills at a container storage area and from releases at other solid waste management units.

Depth to ground water is approximately 5 feet. This unit extends to a depth of approximately 60 feet, and is separated from a lower artesian aquifer by a 30 foot low permeability zone. The facility is located in a area that is primarily industrial, but also includes a few residential households.

EXPOSURE PATHWAYS

Ground water is the primary contaminant migration pathway at the site. The risk of exposure is minimal, however, as ground water affected by contamination is not used as a drinking water source. The nearest residential household is located 200 feet from the facility. An ephemeral creek is located 300 feet from the facility.

SELECTED REMEDY

A ground-water extraction and treatment system began operation in August 1992. Extracted ground water is treated with an air stripping unit. The total capital and O&M costs are estimated to be $1.8 million (1991).

INNOVATIVE TECHNOLOGIES CONSIDERED

None.

CONTAMINATION DETECTED AND CLEANUP GOALS

Media	Estimated Volume	Contaminant	Maximum Concentration (mg/l)	Action Level	Cleanup Goal* (mg/l)	Point of Compliance
ground water	Not given	benzene	0.046	Not given	0.005*	**
		xylene	0.734		70.0	
		ethyl benzene	0.099		3.5	
		toluene	0.816		10	
		1,1 dichloroethane	2.675		0.94*	
		1,1,1-trichloroethane	3.980		0.20*	
		1,1,2-trichloroethane	0.033		0.006	
		1,1,2,2-tetrachloroethane	0.002		0.002	
		1,2-dichloroethane	0.042		0.005	
		chloroethane	0.021		0.01	
		1,1-dichloroethylene	0.978		0.007*	
		trans-1,2-dichloroethene	210		0.07	
		vinyl chloride	106.5		0.002*	
		tetrachloroethene	0.36		0.007	
		trichloroethylene	300		0.005*	
		arsenic	0.012		0.05*	
		cyanide	0.31		0.2	

- * Cleanup goals are Maximum Contaminant Levels
- ** The point of compliance is defined as the downgradient boundary of the parcel which contains all of the regulated units, and includes all monitoring wells along 84th Avenue (East Valley Road).

PUBLIC PARTICIPATION

A public meeting was held on March 17, 1986, to discuss the permitting process at Hytek. No comments were received from the public.

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, benzene, TCE, toluene, xylene, inorganics/heavy metals, arsenic; on-site treatment, air stripping

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STATEMENT OF BASIS/FINAL DECISION AND RESPONSE TO COMMENTS SUMMARY

REGION X
ID# 4654

Envirosafe Services of Idaho, Inc., Site B (ESII-B)

Grand View, ID
(Signed November 8, 1988)

Facility/Unit Type: Treatment, storage and disposal facility
Contaminants: Tetrachloromethane, Trichloromethane, Chloromethane, Dichloromethane
Media: Air and ground water
Remedy: Cap with vapor collection and treatment system

FACILITY DESCRIPTION

Envirosafe Services of Idaho, Inc. Site B (ESII-B) is a 120-acre land disposal facility located approximately 10 miles northwest of Grandview, Owyhee County, Idaho. The site is located on a plateau near the Castle Creek/Snake River drainage divide, well outside the 100-year floodplain. The site is very arid, with a precipitation rate of about 7.3 inches per year. The area surrounding the site is sparsely populated and is used primarily as agricultural and range land. A birds of prey sanctuary is located near the facility.

The site is underlain by gravels grading into interbedded lacustrine (lakebed) sands and clays (60-80 feet below ground surface). The regional aquifer is an artesian aquifer found about 1,800 feet below ground surface. Ground water is encountered at a depth of 180 to 200 feet beneath the site. The upper aquifer is separated by 20 to 30 feet of clay from a lower aquifer.

The site was first developed as a Titan Missile Silo Complex by the US Air Force (USAF). The site was sold to WesCon when the USAF discontinued site activities. WesCon began disposing pesticide/herbicide wastes in the silos on August 1, 1973. By 1980 the silo complex was almost filled with a wide variety of hazardous and solid wastes. ESII took control of the site in 1981, after WesCon was convicted of illegal disposal of PCBs in a 1981 criminal trial.

In November 1988, EPA and Idaho Department of Health and Welfare (IDHW) jointly issued a RCRA permit to ESII-B pursuant to RCRA, HSWA and Idaho Code §39.4401. The permit required ESII-B to place covers and vapor collection/treatment systems on the units associated with the missile silo/radar antennae silos where hazardous and PCB wastes were disposed, and to implement a ground-water monitoring program.

EXPOSURE PATHWAYS

Potential exposure pathways for unsaturated soil and ground water include inhalation of organic vapors venting from the silos and, to a much lesser extent, escaping from the soil; and consumption of ground water. Cap placement, along with restricted site access minimizes the risk of exposure through inhalation. The risk of exposure through ground water ingestion is minimal as the aquifer beneath the site is not used as a drinking water source.

SELECTED REMEDY

Caps and carbon adsorption units were placed on top of the silo complexes for treatment of air emissions. A ground-water monitoring program was implemented to monitor the integrity of the three silo complexes, and other land-based units, both past-practice and regulated.