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.

CONTAMINATION DETECTED AND CLEANUP GOALS

Media	Estimated Volume	Contaminant	Maximum Concentration (ppb)	Action Level*	Cleanup Goal	Point of Compliance
ground water	N/A	tetrachloromethane	35	*	not specified	downgradient edge of the unit.
		trichloromethane	200	*		
		chloromethane	130	*		
		dichloromethane	19	*		
vapors from silos		1,1 dirchloroethene	31			exit point from silo.
		m, p xylenes	11			
		ethyl benzene	5			

* A quantitative method risk-based to determine action levels that would trigger ground water corrective action was specified in an August 1993 permit modification. Individual action levels are not specified and have not yet been exceeded.

On August 4, 1993, IDHW approved a class 2 permit modification implementing a ground-water compliance monitoring program.

INNOVATIVE TECHNOLOGIES CONSIDERED

None.

PUBLIC PARTICIPATION

The public comment period began on August 30, 1988. and continued through October 14, 1988. Public meetings were held on September 15, 1988, and on September 29, 1988. Numerous comments were received from the public concerning the adequacy of the ground-water monitoring system, the facility's proximity to Castle Creek and the Snake River, and facility operations. Numerous comments were also received from ESII. EPA and IDHW responded to all of the comments, which resulted in minor changes to the permit.

Regular public meetings are held at least quarterly with the Owyhee County Commissioners. Public meetings/hearings are held as necessary for permit modifications.

NEXT STEPS

In response to the detection of VOCs in ground water, a draft CMS was submitted by ESII-B in April 1993. The study proposes forced venting of the existing silo vent, and ground-water extraction and treatment. The CMS is currently under review by EPA and the Idaho Department of Environmental Quality. ESII-B continues the collection and analysis of ground-water samples.

KEY WORDS

air, ground water; ingestion, inhalation; VOCs; capping, carbon adsorption, monitoring

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