STATEMENT OF BASIS/FINAL DECISION AND RESPONSE TO COMMENTS SUMMARY

REGION X
ID# 3466

Evanite Fiber Corporation

Corvallis, OR
(Signed March 23, 1990)

Facility/Unit Type:	**Fiberboard manufacturing plant**
Contaminants:	**Trichloroethylene (TCE); Chloroform; Vinyl Chloride 1,1-Dichloroethane (1,1-DCA); Trans-1,1-dichloroethene (Trans-1,1-DCE); 1,1,1-Trichloroethane (1,1,1-TCA)**
Media:	**Ground water, soil, air, surface water**
Remedy:	**Ground water pump and treatment, soil vapor extraction**

FACILITY DESCRIPTION

In March of 1990, a post-closure permit was issued to Evanite Fiber Corporation (Evanite) for long term care of a hazardous waste landfill created by a large spill of TCE. Corrective action conditions under the permit required ground-water remediation for releases from the landfill.

The depth to ground water is approximately 20 feet. Ground water flows northeast and discharges into the Willamette River. The Willamette and Marys Rivers are the two nearest surface water bodies. The Evanite facility is located at the confluence of these rivers and is approximately 1/2 mile from downtown Corvallis. The facility is surrounded by a residential neighborhood and farmland. A city park is also located at the river confluence and includes a boat ramp and bicycling facilities.

EXPOSURE PATHWAYS

Contamination has been detected above drinking water levels in wells in the nearby community. The contamination has also been detected in the Willamette River, which is used for recreation. Potential for exposure due to air emissions are extremely high, particularly at the neighboring park. Contaminated soil is not an exposure pathway because the contaminated soils were removed during closure, and the remaining affected area has been capped.

SELECTED REMEDY

Soil vapor extraction will be used to remediate the contaminated subsoils which remain in the landfill, while ground-water remediation consists of a pump and treat system. Contaminated ground water will be pumped from the extraction well network, air-stripped to remove the volatile contaminants, and then discharged to Evanite's wastewater treatment system. TCE recovered from the air stripper and soil vapor extraction system will be recovered and reused in the manufacturing process. Remaining air emissions from these units will be vented to a carbon adsorption unit, and the spent carbon will be treated at a carbon regeneration facility off-site. Cost of remedy is currently estimated at approximately $450,000. This cost does not include initial investigation costs or installation of the ground water treatment system, as those activities have been completed. Remedy selection was based on effectiveness.

CONTAMINATION DETECTED AND CLEANUP GOALS

Media	Estimated Volume	Contaminant	Maximum Concentration	Action Level	Cleanup Goal	Point of Compliance
ground water*	1200 million gallons	Chloroform 1,1-DCA Trans-1,2-DCE 1,1,1-TCA TCE Vinyl Chloride	1700ug/l 1000ug/l 6700ug/l 1000ug/l 18 inches layer of TCE 4200ug/l	5.7 ug/l 5 ug/l 100 ug/l 200 ug/l 5 ug/l 2 ug/l	5.7 ug/l 5 ug/l 100 ug/l 200 ug/l 5 ug/l 2 ug/l	landfill "unit" boundary
air*	Not given	TCE	> 1 ppm	.27 μ/m^3	.27 μ/m^3	maximum exposed individual
surface water*	Not given	TCE	14.4 mg/l	5 ug/l	5 ug/l	surface water monitoring stations along river bank and in on-site culvert
soil	30 acre-feet	TCE	10,000 mg/kg	Not given	Not given	

* Contaminants detected off-site in media.

INNOVATIVE TECHNOLOGIES CONSIDERED

Soil Vapor Extraction.

PUBLIC PARTICIPATION

A public meeting/hearing was held on December 12, 1989. Approximately 65 people attended. Comments received during the public comment period largely concerned air emissions at the facility, most of which are not subject to RCRA.

NEXT STEPS

Ground-water investigations at the facility have detected the presence of a separate dense phase plume. The permit contained a requirement to determine whether the dense phase plume is continuing to migrate along the aquitard; this investigation has been completed. EPA and the State are concerned that this plume will provide a continuing source of contamination, and will not be easily remedied by an extraction program. The permit requires that Evanite research cleanup technologies once the current corrective action system ceases to perform effectively, and implement an appropriate remedy.

KEY WORDS

ground water, soil, air; ingestion, inhalation; VOCs; air stripping, on-site treatment, soil vapor extraction, carbon adsorption

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