

SUPERFUND Fact Sheet

PALERMO WELLFIELD
Tumwater, Washington



U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 10

JULY 1999

The U.S. Environmental Protection Agency (EPA) is seeking comments on alternatives for cleaning up remaining contamination at the Palermo Wellfield Groundwater Contamination site. The attached document, called a Proposed Plan, contains more information on the various cleanup alternatives. All comments received during the public comment period, from August 6, 1999 to September 6, 1999 will be considered before EPA chooses a final action for the site. You are encouraged to send written comments to:

Bob Kievit, Project Manager
U.S. EPA/Washington Operations Office
P.O. Box 47600
Lacey, Washington 98504

THE CONTAMINANTS

TCE and PCE are common chlorinated organic solvents that are used for metal degreasing, solvent extraction, dry cleaning, and as a fumigant. TCE and PCE belong to a family of chemicals known as volatile organic compounds (VOCs) which move easily through the environment and may be harmful to people who are exposed to them. Potential health problems from exposure depend on a variety of things, including how the chemical entered the body, how long and how often you have been exposed, and how sensitive you are to its effect.

EPA's RECOMMENDED ALTERNATIVES

For Groundwater Contamination

The air stripping treatment system at the Palermo Wellfield, designed and constructed by EPA, began operating and was turned over to the city of Tumwater in March 1999. The city then assumed responsibility for operation and maintenance of the system. The recommended alternative for responding to the threats posed by contaminated groundwater is continued operation of the air stripping treatment system.

EPA will hold a public meeting to discuss all of the alternatives. Verbal and written comments will also be accepted at the meeting to be held:

August 17, 1999 from 7:00-9:00 p.m.
at Tumwater City Hall
Training Room
555 Israel Road SW
Tumwater, Washington

For Soil Contamination at Southgate Mall

The soil vapor extraction system, installed to remove a source of tetrachloroethylene (PCE) from beneath the Southgate Mall area near Southgate cleaners, has removed approximately 410 pounds of PCE. EPA recommends that the operation of the system continue until soils no longer leach PCE at levels of concern, to prevent further groundwater contamination.

For Surface Water and Indoor Air

The recommended alternative for surface water and indoor air problems is to install a french drain to collect groundwater seepage at the base of Palermo bluff so that water will not collect in crawl spaces of homes in the Palermo Valley. This water will be routed to the golf course where it will be agitated by two surface aerators to remove the contaminants. This treatment structure will look like a vigorously bubbling pond with two fountains. Treated water would drain through the existing storm water ditch system, eventually discharging to the Deschutes River.

Other Alternatives

Other alternatives evaluated range from taking no action; to using a pump-and-treat system to clean groundwater; to planting trees in the area of ponding surface water.

For More Information

Documents concerning the site are available for your review at: The Information Repository located at the Tumwater Public Library, 7023 New Market Street and EPA's Washington Operation Office, 300 Desmond Drive SE in Lacey.

If you have questions, please contact:

Robert Kievit, EPA Remedial Project Manager at (360) 753-9014

Debra Packard, EPA Community Involvement Coordinator at (206)553-0247

EPA can also be reached by calling toll-free 1-800-424-4372

To ensure effective communication with everyone, additional services can be made available to persons with disabilities by contacting one of the numbers listed above.

BACKGROUND

The Palermo Wellfield, located just east of Interstate 5 near the intersection of Trosper Road and Capitol Boulevard, consists of six wells that provide up to 50% of the drinking water for the city of Tumwater. In 1993, routine sampling of the Palermo Wellfield detected the solvent trichloroethylene (TCE) in three of the city wells. The city removed the three contaminated wells from service and replaced them with two new drinking water wells at another location.

The Washington State Department of Ecology identified possible sources of the contamination during a preliminary investigation. At the same time, the city traced a plume of contamination flowing from west to east.

The Palermo Wellfield site was added to EPA's National Priorities List (NPL) of contaminated sites identified for potential long-term cleanup on April 1, 1997. Further investigations revealed the presence of TCE and PCE in soil and groundwater at the site. TCE and PCE were found near Interstate 5 (I-5) and Trosper Road in groundwater that flows east toward the Palermo Wellfield.

The highest levels of TCE in groundwater were detected in subsurface groundwater east of the commercial area in the residential Palermo Valley at the Rainier Avenue and "O" Street intersection. The highest levels of PCE in groundwater were detected below ground surface at the Southgate Mall. Groundwater in these locations is not being used as a drinking water source.



United States
Environmental Protection
Agency

Region 10 (ECO-081)
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