

# SUPERFUND

## Fact Sheet

PALERMO WELLFIELD GROUNDWATER CONTAMINATION  
Tumwater, Washington



U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 10

October 1998

*U.S. Environmental Protection Agency (EPA) efforts continue to clean up soil and groundwater contamination at the Palermo Wellfield Groundwater Contamination site. The actions being taken by EPA's Removal Program (immediate, short-term actions to stabilize and secure the site) will soon be completed. Meanwhile, investigations and plans by the Remedial Program for the long-term final cleanup are underway.*

### Removal Program Activities

#### The Soil Vapor Extraction System 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 been more successful than predicted. Approximately 250 pounds of PCE has been removed from soil beneath Southgate Mall to prevent further groundwater contamination. Operation of the system will continue as long as it continues to remove this source of PCE to groundwater. Currently about one half pound of PCE is being removed each day.

#### The Air Stripping Treatment System at the Palermo Wellfield

Work is progressing well on the installation of the air stripping treatment system that will treat all water from the six wells at the Palermo Wellfield. All of the underground construction has been completed. The foundations are in place for a small building and for the two circular air stripping towers, approximately 33 feet tall and 8 feet in diameter. The air stripping treatment system will remove the volatile organic compounds, PCE and TCE, by forcing air through the water and causing the compounds to evaporate. The goal is to have the treatment system operating before the end of the year.

### Remedial Program Activities

The detailed study of the cause and extent of contamination at the site and proposed options for the long-term final cleanup of the site are referred to as the Remedial Investigation/Feasibility Study (RI/FS). Most of the sampling work needed for the Remedial Investigation has been completed. The data, along with information from owners of potential sources of contamination, is currently being assembled and analyzed. Results of these studies and information about the cleanup will be presented in future fact sheets as they become available.

#### 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.

## Background

The Palermo Wellfield, located just east of Interstate 5 near the intersection of Trospen 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 Trospen 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.

## 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.

If you have questions about the on-site activities, please contact:

- **Thor Cutler**, EPA Removal On Scene Coordinator at (206) 553-1673
- **Robert Kievit**, EPA Remedial Project Manager at (360) 753-9014
- **Jean Baker**, EPA Community Relations Coordinator at (206) 553-2587

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



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## ***SUPERFUND FACT SHEET***

*Palermo Wellfield  
Tumwater, Washington*

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