EPA U S ENVIRONMENTAL PROTECTION AGENCY REGION November 1999

The U.S. Environmental Protection Agency (EPA) has chosen a final cleanup plan for the Palermo Wellfield Superfund site. The Record of Decision (ROD), the official document outlining this plan, was signed on November 16, 1999. During the public comment period on the Proposed Plan, EPA received comments that led to a revision to the cleanup plan. This fact sheet summarizes those comments, as well as the different parts of the selected cleanup.

Community Comments and Concerns

From August 6 through September 6, 1999, EPA invited public comment on the Proposed Plan for cleanup of the Palermo Wellfield Superfund site. On August 17, a public meeting was held at the Tumwater City Hall to receive and document community comments on the Proposed Plan. During this meeting, EPA discussed the Remedial Investigation/Feasibility Study (RI/FS) performed at the site. The RI/FS is where EPA studies the problem and assesses possible solutions. EPA used certain criteria to evaluate and compare possible cleanup options for Palermo. At the public meeting, EPA reviewed the proposed options for cleaning up contaminants in soil, groundwater, surface water, and indoor air.

While generally supportive of EPA's proposed cleanup plan, community members raised many issues which were addressed at the public meeting and/or in the ROD's Responsiveness Summary, which is part of the ROD.
Specific questions about the french drain alternative focused on noise, safety, when it would be completed, increased traffic during construction, and protecting the wildlife and trees in the area. People also asked whether residents and their children would be protected from contaminants during construction.

Revision to Cleanup Plan

During the comment period, EPA received some new information that prompted a revision to the Palermo cleanup plan. Several residents of the Palermo neighborhood indicated that there are houses beyond the west side of Rainier Avenue which contain standing water in their crawl spaces during wet seasons. The french drain remedy in the Proposed Plan only addressed houses along the west side of Rainier Avenue, and would have had little or no effect on the groundwater table in the rest of the Palermo Valley neighborhood. Based on these comments, EPA revised the cleanup plan. As the cleanup remedy is designed, EPA will investigate the groundwater table throughout the entire Palermo neighborhood. If standing water is found to contain contaminants of concern and unacceptable risks are discovered, EPA will either lower the groundwater table or ventilate the crawl spaces in order to protect the residents.

Overview of EPA's Selected Cleanup Remedies

For Groundwater Contamination

EPA constructed and tested an air stripping treatment system at the Palermo Wellfield. In March 1999, EPA turned this system over

to the City of Tumwater for operation and maintenance. The selected remedy includes continuing to run this system, until the groundwater consistently meets drinking water standards in all wells at the Wellfield.

For Soil Contamination at Southgate Mall

The soil vapor extraction (SVE) 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 to date. To prevent further groundwater contamination, EPA will continue to operate this system until soils meet cleanup levels. This is expected to take less than one year, after which the SVE system will be taken down. After this time, EPA does not anticipate the need for any land use restrictions due to the Superfund site.

For Surface Water and Indoor Air

The cleanup remedy chosen for surface water and indoor air problems is to install a french drain to collect groundwater seepage at the base of Palermo bluff. This will prevent contaminated water from collecting in crawl spaces of homes in the Palermo Valley, as these contaminants can potentially evaporate into the indoor air and pose a health risk to residents. The french drain will route this water through a storm drain to the Tumwater Valley Municipal 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 will drain through the storm water ditch system, eventually discharging to the Deschutes River.

EPA will also monitor trends in trichloroethylene (TCE) and PCE concentrations in groundwater and surface water, the effectiveness of natural recovery, and the effectiveness of the treatment system. Studies indicate that it will take between five to thirty years to reduce contaminants in the groundwater enough to meet drinking water standards. EPA does not anticipate any land use restrictions due to the Superfund site. Property owners, government officials, and well drillers will be notified of the groundwater contamination plume boundaries to assure that no supply wells will be inadvertently drilled into the contamination.

The Contaminants

Trichloroethylene (TCE) and tetrachloroethylene (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 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. At this time, the city removed the three contaminated wells from service.

On April 1, 1997, the Palermo Wellfield site was added to EPA's National Priorities List (NPL) of contaminated sites identified for potential long-term cleanup. Further investigations revealed the presence of TCE and PCE in soil and groundwater at the site.

EPA discovered a plume of groundwater contaminated with PCE and TCE. This plume began at a commercial area east of the site, extending through a residential area to the Wellfield. Studies also found PCE and TCE in surface water in the residential area next to the Wellfield.

EPA WANTS TO HEAR FROM YOU

EPA strives to provide you with useful environmental information. Please feel free to call, write or email us to let us know how we can improve our fact sheets to suit your needs. You can email Debra Packard at **packard.debra@epamail.epa.gov.**

We are exploring electronic distribution of fiuture fact sheets. Would you like to be notified by email that this information is available on our web site?

Who Can I Call If I Have Questions?

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 above.

Where Can I Get More Information

The Administrative Record, for this site, is available for your review at the Information Repositories located at the

Tumwater Public Library,
7023 New Market Street

and

U.S. Environmental Protection Agency
Seattle Office
1200 Sixth Avenue
Records Center (7th Floor)

United States
Environmental Protection
Agency

Region 10 (ECO-081)
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