

SUPERFUND

Fact Sheet

WYCKOFF/EAGLE HARBOR SUPERFUND SITE
Bainbridge Island, Washington



U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 10

February 2000

EPA Chooses Final Cleanup Plan for Wyckoff

The U.S. Environmental Protection Agency has decided how it will clean up contaminated soil and groundwater at the Wyckoff site. The Record of Decision, or ROD, is the official document which outlines the plan. It was signed on February 14, 2000. This fact sheet summarizes the cleanup plan. It also summarizes EPA's response to concerns raised by the community.

EPA Selects In-Situ Thermal Remediation

How will the remedy work?

EPA has selected *In-Situ Thermal Remediation* to clean up the site. The site first will be surrounded by an underground sheet pile wall to contain the contaminants. A temporary asphalt cover will be placed over the site, and filter systems will be installed, to reduce emissions. EPA will conduct a small-scale "pilot" study to test the effectiveness of this technology at the site. If the test is successful, EPA will move on to full-scale thermal remediation.

In-situ thermal remediation is an innovative technology. It involves the use of steam injection and, possibly, electrical resistance heating. The contaminated zone will be heated by injecting steam underground. The heat makes the contaminants become more mobile and easy to remove. Then, contaminants, groundwater, and vapors will be pumped out and treated, or sent off site for disposal.

If successful, this remedy has the potential to remove and destroy a significant amount of contaminants in the soil and groundwater within 10 years.

What were the cleanup choices?

In its Proposed Plan, EPA identified three cleanup alternatives. The first was no further action. This choice would have involved maintaining the existing groundwater extraction and treatment system until it is no longer functional. No additional action would have been taken.

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The second alternative was containment, which would have involved (1) installing a physical barrier to prevent contamination from moving off-site, (2) replacing the existing groundwater treatment plant, and (3) capping contaminated soils. Contaminants would have remained in place at the site with this option.

The third alternative---In-Situ Thermal Remediation---was selected as the remedy.

Why did EPA choose this remedy?

EPA evaluated this remedy against nine criteria under the Superfund Program. The criteria include *overall protection of human health and the environment, long term effectiveness and permanence, cost, community acceptance, reduction in toxicity, mobility, and volume through treatment*, and others. These evaluations are described in detail in the Proposed Plan (issued last October) and in the ROD. EPA found that the selected remedy could provide the greatest protection to human health and the environment, that it could permanently reduce risks by treating the principal threat at the site, and that it is a cost-effective solution.

EPA encouraged the public to comment on the proposed remedy. A public meeting and availability session were held in October, and EPA accepted comments until December 2, 1999. EPA also met with the Association of Bainbridge Communities, a group which receives funding from EPA to participate in the decision-making process at Wyckoff. All comments received were considered by EPA and helped to shape the final decisions outlined in the ROD.

EPA also assembled a group of prominent researchers and industry experts. The group

served as an advisory panel, providing oversight and consultation for evaluation of thermal technologies. The panel fully supports use of thermal technologies at this site and believes measures can be taken to minimize any nuisance to the community.

Some Community Comments and Concerns

The local community generally supports the selected cleanup plan. However, there are significant concerns regarding noise levels, air emissions, odors, and visual impacts during construction and operation.

One point of particular concern was the noise associated with driving piles for the sheet pile wall. EPA has since changed the proposed construction schedule. Construction is now expected to happen between November 2000 and February 2001. This time frame will help limit disturbance to residents. People are less likely to be outside or have their windows open at this time of year. While some disturbance is still likely, EPA intends to minimize noise to residential areas as much as possible.

Noise associated with the cleanup operation, along with air emissions, odors, and light glare, will be evaluated during the pilot study. It is unclear at this time how large or small of a problem these issues will be. If necessary, mitigation measures will be designed for the full-scale project. Care will be taken by EPA to make sure that disturbance to residents is limited.

In addition to residents, tribal, state, and federal representatives submitted comments on the Proposed Plan. The Suquamish Tribe is interested in a permanent solution to the contamination, and supports the use of

thermal technologies at Wyckoff. Comments of support were received from state and federal agencies, as well.

In total, EPA received 12 comment letters, raising a wide range of questions and concerns. EPA's responses to all of the comments received are contained in a document called the Responsiveness Summary, which is part of the ROD.

What Happens Next?

EPA is now beginning design of the sheet pile wall and the thermal system pilot study. Wall installation is expected to begin in November 2000. The pilot study, a two-year effort, would begin operation in fall 2001. EPA will continue to keep the community informed as progress is made.

Documents: The Administrative Record is a file that contains all information used by EPA to make decisions on the cleanup actions from the beginning of the site's history. The Administrative Record can be reviewed at the EPA Records Center, 7th Floor, 1200 Sixth Avenue, Seattle. Call 206/553-4494 to make an appointment. Select documents can be viewed at the Information Repository located at the Bainbridge Island Public Library, 1270 Madison Avenue North. If the library does not have the document you need, feel free to call Andrea Lindsay, EPA Community Involvement Coordinator, at (206) 553-1896.

Additional services can be made available to persons with disabilities by calling EPA toll-free at 1-800-424-4372.

Site Background

The Wyckoff/Eagle Harbor Superfund Site is divided into four work areas, called "operable units." The four operable units are: West Harbor, East Harbor, Wyckoff Soil, and Wyckoff Groundwater. The Soil and Groundwater Units are the subject of this fact sheet. The former Wyckoff wood treating facility, located at the mouth of Eagle Harbor on Bainbridge Island, operated from the very early 1900's to 1988. As a result of activities at the site, surface and subsurface soils at the facility, and groundwater beneath the facility, became severely contaminated. Contaminants include creosote and other wood treatment compounds. An estimated 1 million gallons of creosote product remains in the site's soil and groundwater. These contaminants pose a risk to public health and the environment.

In 1987, EPA listed the site as a Superfund site. A groundwater extraction and treatment system has been operated on site since 1990. However, contaminants are still moving into the marine environment and only relatively small amounts of contaminants are being removed.

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For More Information:

Hanh Gold, EPA Project Manager for Wyckoff Groundwater and Soils, will be on leave from February through July 2000. During this time you may contact **Ken Marcy** for more information. Ken can be reached at (206) 553-2782 or E-mail marcy.ken@epa.gov.

Or, you may contact **Andrea Lindsay**, EPA Community Involvement Coordinator, at (206) 553-1896 or E-mail lindsay.andrea@epa.gov.

Toll-Free Telephone Number: 1-800-424-4372

EPA Web Site: www.epa.gov/r10earth/
click on "Index" at the bottom
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