

EPA Issues Cleanup Plan for Upland and Offshore at Wyckoff Site

Wyckoff/Eagle Harbor Superfund Site

May 2018

On May 14 the U.S. Environmental Protection Agency issued a cleanup plan, called a Record of Decision Amendment, for upland and offshore portions of the Wyckoff/Eagle Harbor Superfund Site.

The cleanup plan modifies earlier cleanup decisions for the site, issued by EPA in 1994 and 2000. The plan describes additional actions that EPA will implement over the next three to four years, which include:

- Improvements to the access road between Eagle Harbor Drive and the former Wyckoff wood treating facility.
- Replacement of the steel sheet pile wall around the perimeter of the facility.
- Dredging and offsite disposal of contaminated sediments from portions of the beaches north and east of the facility.
- Capping dredged areas with a contaminant-retarding material and clean sand.

The work will take about four years to complete. This summer, additional sediment sampling will be conducted on the beaches. The results will inform the remedial design of the sediment caps and replacement wall. Construction will take about two years.

Additional cleanup actions are also being planned to address soil and groundwater contamination in the upland area inside the sheet pile wall. The cleanup plan for upland soils and groundwater will be presented in a future Record of Decision Amendment, which EPA plans to issue before the end of 2018.

Public Comments Helped Shape Cleanup Plan

EPA held a public comment period on our proposed cleanup plan from April 25 through June 30, 2016. We held a public meeting on Bainbridge Island on April 27, 2016 to record comments on the proposed cleanup plan. EPA carefully considered all comments received during the public comment period before choosing the cleanup alternatives documented in the Record of Decision Amendment. We responded to these comments in the Responsiveness Summary, included in the cleanup plan.

About the Site

The Wyckoff Eagle Harbor Superfund Site is on the east side of Bainbridge Island in central Puget Sound, Washington. EPA added Eagle Harbor to the Superfund National Priorities List in 1987, and divided the site into cleanup areas, also called Operable Units (OUs):

- **Eagle Harbor sediment** – Sediment on the bottom of Eagle Harbor became contaminated with creosote and other wood preserving chemicals released from the former Wyckoff wood treating facility. Also called the East Harbor Operable Unit (OU1).
- **Wyckoff wood treating facility soil and groundwater** – located on the south side of Eagle Harbor, this area includes soil and groundwater that became contaminated during decades of wood treating operations. Also called the Soil and Groundwater Operable Units (OU2 and OU4).
- **West Harbor soil and sediment** – the site of a former shipyard, this area became contaminated with mercury and other metals. Also called the West Harbor Operable Unit (OU3).

The remedy in OU3 is functioning as designed; no additional actions are needed. EPA's new cleanup plan includes additional actions in OU1, and in OU2/OU4.

EPA's Selected Cleanup Alternative Was Compared to Other Alternatives

EPA selected a cleanup alternative for the intertidal beaches called Alternative 3. Alternative 3 is described in detail in the April 2016 Proposed Plan at go.usa.gov/xQWPD, also available at epa.gov/superfund/wyckoff-eagle-harbor and at the information repository noted the back page. We compared it with a number of other possible alternatives, including taking no action. EPA first evaluated each alternative against seven of the nine established criteria identified on this page (#1 thru #7). Criteria #8 and #9 were evaluated after we received comments on the Proposed Plan. We believe the selected alternative protects people's health and the environment and achieves the best balance in meeting the remaining criteria. Public comment supported the selected alternative, and the State and the Suquamish Tribe supported it as well.



Criteria for Evaluating Cleanup Alternatives

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| 1. Overall protection of human health and the environment | 5. Reduction of mobility, toxicity, and volume of contaminants through treatment |
| 2. Compliance with state and federal laws known as "Applicable or Relevant and Appropriate Requirements (ARARs)" | 6. Implementability, or ability to carry out, the alternative |
| 3. Short-term effectiveness | 7. Cost |
| 4. Long-term effectiveness | 8. State acceptance |
| | 9. Community acceptance |

Selected Remedy for East Harbor Operable Unit (OU1)

In the intertidal beaches next to the former Wyckoff wood treating facility, the current remedy is monitored natural recovery. This portion of the remedy is not functioning as designed. EPA's new cleanup plan modifies the 1994 cleanup plan and includes:

- Dredging approximately 6,600 cubic yards of contaminated sediment from select areas of the beaches.
- Offsite (landfill) disposal of dredged sediments.
- Backfilling dredged areas with a multi-layer cap. The cap will include reactive materials (oleophilic clay or other reagents) in the bottom layer to slow the upward migration of contaminants left below the cap. The top of the cap will consist of clean imported sand, graded to match the surrounding beach.
- Monitoring to confirm dredged and backfilled areas remain clean.
- Monitoring of natural recovery areas. Outside the dredging and capping areas, the remedy remains monitored natural recovery. In these areas, contaminant concentrations are expected to decline over time due to natural processes. EPA will monitor these areas to confirm the effectiveness of natural recovery.
- Institutional Controls. An environmental covenant or similar property restriction will be put in place to prohibit marine construction activities that could disturb the capped areas of the beach.
- Shellfish consumption advisories. Eagle Harbor is currently closed to recreational shellfish harvesting. EPA will monitor shellfish tissue advisories and work with the Department of Health to update the advisory as appropriate. An advisory will remain in place until the shellfish are safe to eat.

Selected Remedy for the Soil and Groundwater Operable Units (OU2 and OU4)

In the upland portion of the former Wyckoff wood treating facility, the current remedy is containment. Containment measures include the steel sheet pile wall around the perimeter of the facility and a groundwater extraction and treatment system. The perimeter wall is a critical element of the containment system, because it prevents contaminated soil and groundwater from moving into Eagle Harbor. The above-ground portion of the wall is corroding and must be replaced. EPA's new cleanup decision amends the 2000 cleanup plan and selects:

- A new reinforced concrete perimeter wall. The new wall will be designed to contain upland soils and groundwater, both now and after the implementation of additional cleanup actions planned in the upland portion of the site. It will also be designed to withstand saltwater corrosion, the erosive forces of tides and currents, and anticipated sea level rise. The new wall will be built on the outboard/seaward side of the existing wall, as shown in Figure 1.
- Improvements to Creosote Place NE, the road between Eagle Harbor Drive and the former wood treating facility. The improvements, which will reduce the steep grade over a portion of the road and straighten a sharp curve, are needed to transport large construction equipment and materials to the work area.



About Creosote

The beaches at the site are contaminated with creosote, a chemical used to treat wooden rail road ties, utility poles, and pier pilings. Creosote is an oily petroleum-based product with a distinctive odor. The contamination shows up in small patches here and there, usually during falling low tides. It looks like motor oil — brown liquid, thicker than water — with a rainbow sheen.

On bare skin, creosote can cause chemical burns. It contains polycyclic aromatic hydrocarbons (PAHs), which are chemicals found in oil, coal, and tar. Some of the PAHs found in creosote can cause cancer.

Community members are encouraged to avoid contaminated areas of the beach until the cleanup actions in this fact sheet have been implemented. For more information: see the fact sheet at go.usa.gov/x5MD8

Find the Wyckoff – Eagle Harbor Cleanup Plan

Find the Record of Decision Amendment, the Responsiveness Summary, and the Administrative Record (documents that support the cleanup decision) at:

Bainbridge Island Public Library

1270 Madison Avenue N.
Bainbridge Island, WA 98110
(206) 842-4162

Call for hours

EPA Region 10 Superfund Records Center

1200 Sixth Avenue
Seattle, WA 98101
(206) 553-4494 or toll free: 800-424-4372

Call for an appointment

Online

Find site documents, including the Record of Decision Amendment, on EPA's Wyckoff/Eagle Harbor web page:

epa.gov/superfund/wyckoff-eagle-harbor

For More Information

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 TDD or TTY users, please call 800-877-8339 and give the operator Debra Sherbina's phone number.



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Read inside for details