

Executive Summary

Willamette Cove Feasibility Study and Source Control Evaluation

The Revised Feasibility Study and Source Control Evaluation recommend a combination of soil removal and capping for cleanup of the Willamette Cove site upland of the riverbank.

The Oregon Department of Environmental Quality is working with Metro and Port of Portland to complete investigation and cleanup of historical contamination upland of the riverbank. Metro is the current property owner of Willamette Cove.



Willamette Cove Aerial, Google Earth 2017.

Background

The site is a former industrial facility in North Portland along the bank of the Willamette River's Portland Harbor Superfund Site. While currently vacant, future development plans include restoration as a natural area to support aquatic, bird and native vegetation species.

Numerous investigations, assessments and cleanups have been performed at the site since 1988. These investigations provide information on what, where and how much contamination is present. The Port and Metro conducted an initial Remedial Investigation of the site between 2001 and 2002. The investigation presented historical information (prior to 2001) along with a list of contaminants that pose a potential risk to people and ecology (plants and animals). Additional site investigations were conducted between 2002 and 2019.

Investigation Findings

Human health and ecological risk at the site were evaluated in risk assessments completed in 2013 and 2014. Data from the risk assessments were used to develop health-based screening levels and hot spot levels for cleanup. Soil with concentrations above the screening levels present a risk to human health or the environment. DEQ rules outline a preference for

treatment or removal of hot spots (elevated levels of contamination).

A list of chemicals of concern was developed by comparing site data to the screening levels and hot spot levels. Dioxins/furans in the entire upland exceed unacceptable risk levels for humans and animals, while contaminants including metals, petroleum, and PCBs are above risk levels in select areas.

Cleanup Status

In March 2019, Metro and the Port of Portland submitted a revised Feasibility Study and Source Control Evaluation to DEQ. A supplemental groundwater source control evaluation and analysis of potential suitable source control measures was provided in January 2020.

These reports summarize previous investigations and cleanup actions, and evaluate multiple cleanup options to address contamination that poses a risk to people and ecology. DEQ has identified a preferred cleanup option for upland soil, which is documented in a staff report. DEQ, Metro and the Port will conduct a series of public outreach efforts to obtain public feedback on the upland cleanup plan that is presented in the staff report.

Contamination is also present in the riverbank and the sediment of the Willamette River. Cleanup of these areas will occur as part of the larger Portland Harbor Superfund Site cleanup managed separately by the U.S. Environmental Protection Agency.

Upland Cleanup Options

Cleanup options considered must be capable of restoring conditions at the site that will be protective for people and ecology. Accordingly, the Port and Metro have developed a range of potential soil cleanup options, all of which DEQ has determined would be protective of human health and the environment. Soil removal and capping are included in most alternatives.

To identify the preferred cleanup option for upland soil at the site, the alternatives were evaluated and compared against DEQ criteria: effectiveness,



State of Oregon
Department of
Environmental
Quality

Northwest Region Cleanup Program

700 NE Multnomah St.
Suite 600
Portland, OR 97232

Phone: 503-229-6900
800-452-4011
Fax: 503-229-6762

Contact: Erin McDonnell
mcdonnell.erin@deq.state.
or.us

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implementability, implementation risk, long-term reliability, and reasonableness of cost.

The highest ranked, most feasible cleanup option for upland soil was determined to be *Alternative 4c: Focused Excavation with Offsite Disposal, Onsite Consolidation and Cap*. This cleanup option has the following elements:

- Removal and offsite disposal of all soil exceeding hot spot levels for human health.
- Remaining soil above risk levels for people would be consolidated and contained under an engineered cap, also called a consolidation area.
- Remaining soil with higher risk levels for animals and plants, including hot spots, would also be placed in the consolidation area, capped in-place, or disposed offsite.
- After these actions, remaining soil with residual, low-level risk to ecology would be covered with clean soil.
- Additional elements of this cleanup option include preservation of existing native trees, revegetation of disturbed areas and long-term monitoring and maintenance of capped areas.

The location of the soil consolidation area has not been decided. The location will be determined during the design and implementation of cleanup, which happens after the cleanup option is selected. The consolidation area would be designed to adequately withstand events such as seismic, flooding and extreme storms.

Information on source control is also presented in the Feasibility Study and supplemental Groundwater Source Control Evaluation. The evaluation of potential impacts to the river is underway. When this evaluation is complete, DEQ will prepare a groundwater source control decision identifying appropriate source control measures. These measures and cleanup of contamination in the site riverbank, beaches and the adjoining Willamette River under EPA will ensure recontamination does not occur.

For more information

Visit <https://go.usa.gov/xEFdS> or contact Erin McDonnell, Project Manager/ Engineer at 503-229-6900, mcdonnell.erin@deq.state.or.us

Alternative formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.state.or.us.