

Hazardous Waste and Toxics Reduction Program

February 2010

Ecology wants your input on the RCRA Permit with Draft Agreed Order, Draft Public Participation Plan, Draft Remedial Investigation (RI) and Feasibility Study (FS) Reports

The Washington State Department of Ecology (Ecology) prepared this fact sheet to provide information about the planned clean up of a former tank farm site at the Port of Seattle's Terminal 91 (T91). This site is located at 2001 West Garfield Street, Seattle, WA.

RCRA Permit

Enforcement of the U.S. Environmental Protection Agency's (EPA) Resource Conservation and Recovery Act (RCRA) requirements is delegated to Ecology. Ecology's regulations require the Port, as land owner, to maintain a RCRA permit for the Terminal 91 site until corrective action is completed, even though the Burlington Environmental Inc. (BEI) permitted waste treatment and storage facility ceased operations in 1995. This RCRA permit specifies that the Port as permittee will perform the corrective action activities referenced in the Agreed Order.

Agreed Order

In 1998 Ecology, the Port of Seattle (Port), Pacific Northern Oil Corporation (PNO) and BEI, doing business as Philip Services Corp. (PSC) entered into a legal agreement called an Agreed Order. The Port owns the Terminal 91 Site. PNO and PSC both had leased land from the Port at the Terminal 91 Site, and had operated bulk petroleum storage and waste storage and treatment facilities there.

Comments Accepted

February 12 – March 29, 2010

Submit Comments and Technical Questions to:

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Washington State Department of Ecology
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Phone: (360) 715- 5232
E-mail: gtrt461@ecy.wa.gov

DOCUMENT REVIEW LOCATIONS

Washington State Department of Ecology Northwest Regional Office

3190 160th Ave SE
Bellevue, WA 98008
Call for an appointment: Sally Perkins
Phone: (425) 649-7190
Fax: (425) 649-4450
E-mail: sper461@ecy.wa.gov
Hours: Tuesday – Thursday
8:00 AM – 12:00 PM and 1:00 PM – 4:30 PM

Seattle Public Library—Central

1000 Fourth Avenue
Seattle, WA 98104
206-386-4636

Seattle Public Library—Magnolia Branch

2801 34th Avenue W.
Seattle, WA 98199
206-386-4225

Port of Seattle—Pier 69

2711 Alaskan Way
Seattle, WA 98121
206-787-3837

Ecology's Website:

[http://www.ecy.wa.gov/programs/tcp/sites/
portTerm91/portTerm91_hp.html](http://www.ecy.wa.gov/programs/tcp/sites/portTerm91/portTerm91_hp.html)

Facility Site ID: # 2300

Under this Agreed Order, the Port, PNO, and PSC agreed to conduct a Remedial Investigation and Feasibility Study (RI/FS). The RI identified the nature and extent of contamination at the former tank farm site. The FS assessed alternative ways of cleaning up the contamination.

A new draft Agreed Order is available for public review and comment. The new Agreed Order is between Ecology and the Port; PNO has gone out of business since the 1998 order and Philip filed for bankruptcy protection. The new Agreed Order incorporates cleanup requirements for the rest of the Port's T91 facility adjacent to the former tank farm site. Future remediation of the sediments, if necessary, will be accomplished through a different Agreed Order that would include the Port and other potentially liable parties

Public Participation Plan

A draft Public Participation Plan is designed to promote community involvement during the cleanup process. The plan outlines and describes the tools and approaches that Ecology will use to inform the public about site activities, and it identifies opportunities for the community to become involved in this process.

A copy of the plan is available at:

http://www.ecy.wa.gov/programs/tcp/sites/portTerm91/portTerm91_hp.html

Site Background

The T91 site was formerly operated by Philip Services Corp. as a permitted dangerous waste treatment and storage facility, and by other previous tenants as a fuel storage and distribution tank farm.

The chemicals of concern for subsurface soil and groundwater at the site are:

- Gasoline-range petroleum hydrocarbons.
- Diesel-range petroleum hydrocarbons.
- Heavy-oil-range petroleum hydrocarbons.
- Metals.
- Polychlorinated biphenyls.
- Semivolatile organic compounds, including polycyclic aromatic hydrocarbons.
- Volatile organic compounds.

The property is located in an industrial area in the Interbay neighborhood of Seattle. It was operated by various oil companies from 1926 until 1941 when the U.S. Navy took possession. The Port acquired the facility in the 1970s, and the tank farm was operated by Philip Services Corp. and its predecessors from that time until 1995. The tank farm also was operated by various marine fuel marketing companies until 2003. The tank farm was demolished by the Port in 2005.

Draft Remedial Investigation and Feasibility Study Reports

The Remedial Investigation reports identified the nature and extent of the contamination at this site. The Feasibility Study report assessed alternative means of cleaning up the contamination. The cleanup alternatives must protect human health and the environment, and comply with state cleanup standards.

The Feasibility Study also provides information to develop the Cleanup Action Plan. The public will be invited to review and comment on the Draft Cleanup Action Plan (CAP) at a later date.



Remedial Investigation Findings

Findings of the Remedial Investigation included:

- Areas of floating fuel product are present on the water table beneath the former tank farm at the site. They are not migrating beyond their current locations.
- Natural attenuation processes at the site are degrading petroleum hydrocarbon constituents in groundwater.
- Low levels of other chemical constituents are present in groundwater. They are not negatively affecting the adjacent surface water body (Elliott Bay).
- Groundwater at the site is not a current or potential source of drinking water.
- Chemical vapors in the soil are not high enough to pose a health risk for workers at the site under current land uses.

Feasibility Study Findings

First, a set of presumptive remedies were selected for areas down-gradient of the former tank farm, and in separate smaller source areas. These presumptive remedies include:

- Institutional controls such as health and safety requirements for site workers.
- Addressing potential exposures when future land use changes are made.
- Cleaning and decommissioning underground fuel pipelines remaining at the site.
- Implementing a monitored natural attenuation groundwater sampling program. This program will ensure that natural attenuation processes continue to degrade chemicals in groundwater.
- Excavating contaminated soil at the location of a historic underground fuel pipeline release down-gradient of the tank farm.

In the tank farm area, six different cleanup alternatives were considered to meet state cleanup standards:

1. Existing asphalt paving maintenance and monitoring.
2. Containment and passive fuel product recovery from the water table.
3. Active fuel product recovery from the water table, and subsurface structure removal.
4. Containment, subsurface structure removal, and enhanced fuel product recovery from the water table.
5. Limited excavation of areas with fuel product on the water table.
6. Excavation of soils exceeding fuel residual soil saturation limits (i.e., soils that may have the potential for development of fuel product on the water table).

The Port recommends cleanup alternative #4 as the proposed cleanup method for the site.

What Happens Next?

Following the comment period, Ecology will review all comments. A public meeting is not planned for this site, however, one will be held if ten or more people request a public meeting.

If you wish to be added to the mailing list for this site please contact Galen Tritt at 360-715-5232 or by email at gtri461@ecy.wa.gov. In the subject line, please indicate Port of Seattle Terminal 91 mailing list.





Note: For areas shown as Tank Farm Affected Area ("TFAA") that are outside the Tank Farm Lease Parcel, the TFAA includes only soil and ground water below the water table. Soil above the water table (and outside the Tank Farm Lease Parcel) is outside the TFAA.



Explanation



Port of Seattle Property Limits
Tank Farm Lease Parcel



Tank Farm Affected Area
Submerged Land

The locations of all features are approximate.

Port of Seattle Terminal 91 Facility
2001 W. Garfield St., Seattle, WA 98119
Facility ID#2300



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Bellingham, WA 98225**

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**Port of Seattle Terminal 91 Site
King County, WA**

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Public Comment Period: February 12 - March 29, 2010

Facility Site ID #: 2300

If you need this publication in an alternative format, please contact Nancy Lui at (425) 649 - 7117.
Persons with hearing loss, call 711 for Washington Relay Service.
Persons with speech disability call 877-833-6341.
