Terminals, formerly Shell Oil, Harbor IslandGATX

Environmental cleanup plan for bulk fuel terminal ready for public review

Ecology issues draft Consent Decree and Cleanup Action Plan

The Washington State Department of Ecology (Ecology) has drafted a legal agreement for the environmental cleanup of the GATX (formerly Shell Oil) bulk fuel terminal site, located in the north-central section of Harbor Island, Seattle, Washington.

The legal agreement, called a Consent Decree, between Ecology and GATX Terminals Corporation (GATX), will ensure that the cleanup meets the requirements of the Model Toxics Control Act (WAC Chapter 173-340).

The Cleanup Action Plan, which is being implemented under the Consent Decree, describes the proposed cleanup actions and the work to be performed at the site.

Opportunity to comment

Before the Consent Decree and Cleanup Action Plan become final, we offer you the opportunity to review the documents and give us your input. If, during the comment period, 10 or more people request a public hearing, Ecology will hold one for the purpose of receiving oral comment on the proposals.

Background

The GATX Terminals, approximately 14 acres in size, is located in the north-central section of Harbor Island. The terminal was owned and operated by Shell from 1944 to 1994, when GATX purchased the terminal from Shell.

The terminal is divided in to five areas: A, B, C, D, and E Yards. Impacts to the soil and groundwater are due to spills and leaks from above-ground and underground storage tanks, drums and drum handling, and former oil/water separators.

A number of investigations have been performed throughout the GATX property. Since 1973, over 156 soil borings have been drilled to define soil and groundwater conditions. GATX completed a Remedial Investigation/Feasibility Study (RI/FS) in 1997. The purpose of the RI/FS was to collect, develop, and evaluate sufficient information

regarding the site in order to select an appropriate cleanup action. The Cleanup Action Plan is based on the information presented in the RI/FS.

Primary areas of concern

The results of the RI/FS indicate two primary concerns at the site:

- Areas in the C Yard where there are high levels of petroleum contaminated soil primarily due to a fuel spill in 1996, and in the A and B Yards likely due to historical spills.

- Lead and arsenic contamination in the surface soils of, predominantly, Yards B and C. The presence of these metals is likely due to air emissions from an offsite smelter that once operated on the island.

The proposed cleanup actions

Contaminated soil:

Arsenic, lead, and petroleum contaminated soil will be treated by excavation, soil vapor extraction, soil flushing, and natural attenuation or bioremediation.

The following cleanup actions will:

- improve groundwater quality,
- prevent the contamination from moving off the property,
- improve the restoration timeline, and
- enhance bioremediation.

- Excavate the areas where there are high levels of petroleum in the soil in A and B Yards above 20,000 parts per million, and in the C Yard above 10,000 parts per million.
- Excavate the soil contaminated with arsenic and lead down to six inches, or cover with 3 inches of asphalt, or fixate the soil (mix with cement) to prevent direct contact and contaminated water runoff to storm drains and Elliott Bay.
- Allow the remaining contaminants to degrade through biological treatment, called bioremediation, or natural attenuation. Both are based on the reclamation of contaminated soil by naturally occurring micro-organisms capable of destroying toxic chemicals.
- Place an "industrial use only" restrictive covenant on the property deed.

Contaminated groundwater:

Groundwater contaminated by petroleum hydrocarbon product (product) will be treated and controlled by the following actions:

- Extract the groundwater and/or product. Extracted groundwater will be treated before disposal.

- Treat soil below the water table by air sparging. Air sparging involves injecting air into the groundwater which promotes a transfer of contaminants from soil and water to the air. These vapors are then pulled away.

- Remove petroleum floating on the water table whenever present.

- Install a hanging wall barrier to prevent the petroleum from moving and to aid in recovering the contamination.

- Conduct long term groundwater monitoring.

What happens next

After this public comment period, Ecology will review all the comments submitted and will make recommendations for any suggested changes to the documents. Ecology will then prepare a summary of the comments and suggested changes. If significant changes are made to the Consent Decree or Cleanup Action Plan, there would be a second comment period. If no significant changes are made, then the Consent Decree is recorded in the Washington State Superior Court of King County and cleanup action can begin.