



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL
CLEANUP

JUN 19 2015

RECEIVED

JUN 22 2015

DEPT OF ECOLOGY
TCP - NWRO

Ms. Sunny Becker, Site Manager
Washington State Department of Ecology
Toxics Cleanup Program
Northwest Regional Office
3190 160th Ave SE
Bellevue, Washington 98008

Re: U.S. EPA Comments Port of Seattle's Terminal 30 Cleanup Site Documents

Dear Ms. Becker:

The US Environmental Protection Agency has reviewed the Port of Seattle's Terminal 30 Cleanup Site Documents and has the following comments below.

Terminal 30 – Remedial Investigation/Feasibility Study

Comment #1 – RI/FS General Alternatives Evaluation –The alternatives evaluated in the FS appear sufficient to capture a broad range and the selected alternative optimizes mass removal while balancing excessive costs.

Comment #2 – RI/FS Section 2.7.3.

- i. Historic monitoring in general appears sufficient to understand the extent of a NAPL presence and concentrations moving towards East Waterway through groundwater. Although concentrations leaving the site are below water quality criteria, this does not indicate there is no potential for sediment recontamination. In Section 2.7.3 the text notes a subset of wells slightly exceeded screening levels for PAHs but notes elevated concentrations are likely related to particulates and colloidal transport. Colloidal/particulate contaminant transport likely has a higher potential to settle out and impact sediments. This needs to be indicated in this section.
- ii. The text notes that groundwater plumes are generally stable or shrinking except around MW-76A. However the current proposed CAP does not address this area and future monitoring will need to continue to evaluate whether the plume is indeed growing near MW-76A leading to the need for additional action.

Comment #3 – RI/FS Section 3.1 RAOs. Current RAOs for the CAP are to prevent or limit risk from groundwater impacting surface water quality and do not specifically account for the potential for recontamination of sediments. Monitoring needs to evaluate the potential for recontamination of sediments from groundwater leaving the site following EW remediation.

Terminal 30 – Cleanup Action Plan

Comment #1 – CAP Section 1.7 Cleanup Levels. Soil cleanup criteria are for source removal versus meeting final cleanup criteria. This is a reasonable first step, but needs to acknowledge that the project objectives are to comply with final cleanup criteria.

Comment #4 – CAP Section 3.1.6 Operation Criteria. There needs to be an evaluation of extra cost over time associated with continued air sparging to increase biodegradation of dissolved COCs in groundwater leaving the site instead of just turning off the system once primary reduction of source mass occurs.

Comment #5 – CAP Section 3.2.1 Conceptual Model for System Operation. *“Recovery will reduce the LNAPL pore-space saturation by approximately 0.1 based on.”* It is assumed units are feet here but the text requires clarification.

Comment #6 – CAP Section 4.1.5 Schedule.

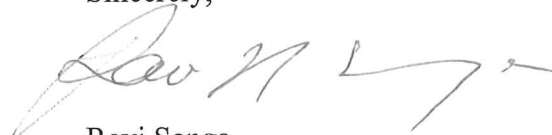
- i. **Pg 19.** Monitoring every 5 years is likely not frequent enough for COP wells. In terms of shutting down the SVE system and then turning it back on once concentrations increase, it needs to be ensured that monitoring is frequent enough to prevent slugs of contamination from releasing. Sampling every five years does not provide a substantial dataset to make decisions on AS/SVE operation. More frequent sampling needs to occur. It would be okay to remove wells until system operation is changed in which case the wells will need to be reactivated for sampling to better evaluate if changes to system operation have caused cleanup levels to be exceeded.

Terminal 30 – SEPA

Comment #1 – It would be useful to get an update on the current schedule discussed in this document. This document is dated a year ago.

Should you have any questions on EPAs above comments, I can be contacted at 206 553 4092 or sanga.ravi@epa.gov.

Sincerely,



Ravi Sanga
Remedial Project Manager
Remedial Cleanup Program
Site Cleanup Unit 3