



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

March 20, 2018

Attn: Helen Bottcher
U.S. EPA Region 10 (ECL-122)
1200 Sixth Avenue
Seattle, WA 98101

RE: Washington State Department of Ecology's (Ecology) comments on the draft Interim Record of Decision Amendment (RODA) for the Wyckoff/Eagle Harbor Superfund Site (Part I) February 2018, prepared by US EPA R10

Dear Ms. Bottcher:

Thank you for the opportunity to review and comment on the draft RODA, which addresses contamination remaining in the intertidal beaches at the Wyckoff/Eagle Harbor Site. Ecology found that the draft RODA is very comprehensive and well written in describing the selected Part I remedy (Remedial Actions in Nearshore area of OU1 - East Harbor Unit and construction of new concrete-reinforced perimeter wall.) Ecology has identified a number of technical and regulatory issues we would like to bring to the Environmental Protection Agency's (EPA) attention. Please note the redline strike-out version of the draft RODA that contains Ecology's detailed comments and edits on the text, tables, and figures is enclosed to facilitate EPA's review.

Following the recent discussion during the Quarterly Meeting of March 14, 2018 with EPA, we have a few comments and recommendations for clarification of remedial actions selected in Nearshore area of OU1 (East Harbor) as follows:

1. Applicable or Relevant and Appropriate Requirements (ARARs):

As shown/explained in the attached ARAR tables (Chemical-specific and Action-specific), the following state law should be considered ARARs:

- WAC 173-340-740(5) - Total site risk adjustment to cleanups levels (CUL).
- WAC 173-201A-510(3) (a), (b), and (c) - Nonpoint source and stormwater pollution.
- WAC 173-303-280(6) & WAC 173-303-040 - Cleanup-only facility: standards for owners/operations: Treating, Storing or Disposing of Dangerous Waste

2. Implementation - Milestone Schedule:

In Section 13.4 Ecology suggests EPA provide a frame work for the timing (relative time frame and/or years) of key elements of RODA including schedules of pre-design sampling efforts, remedial design and remedial action, as well as post-monitoring described in this RODA in conjunction with the forthcoming Part II RODA (RODA for Operable Units 2/4).

3. Post Monitoring:

In Section 13 (Monitored Natural Recovery (MNR) and Post-Monitoring subsection) Ecology suggests EPA plan to conduct the post-nearshore construction monitoring as per a modified version of the existing Operations, Maintenance, and Monitoring Plans (OMMP) for OU1 (HDR, et al, 2011). The existing OMMP would be modified to reflect the new nearshore remediated areas and the MNR areas per the RODA until the time that final Remediation Goals are developed. Ecology provided a similar comment on the 2016 Proposed Plan. The monitoring program should include surveys assessing the physical stability of all nearshore areas and visual assessments of NAPL seeps. The monitoring program should also include chemical analysis of sediment and clam tissues to document attainment of final cleanup objectives in consultation with Ecology, the Suquamish Tribe and other relevant agencies.

4. Previous remedial actions conducted on the sub-tidal portion of East Harbor (OU1):

In the summer of 2016 EPA collected carcinogenic Polycyclic Aromatic Hydrocarbon (cPAHs) data within the J9 and J10 sub-tidal grids (approximately 3 - 5 acres) near the old West Dock area. cPAHs were much higher than the concentration likely protective of human health from a bio-accumulative pathway. The J9/J10 "donut-hole" area - east of the Phase I CAP and northeast of the Phase II CAP - has been a great concern due to little or no observed capping materials. Ecology understands that the contamination concentrations in these sub-tidal area currently meet the Cleanup Level for the protection of benthic community and that this area will likely continue to improve through on-going MNR processes, as well as from source control actions in the nearshore and uplands. However, these MNR and source control actions may not be sufficient to protect human health.

Ecology recommends that an engineering feasibility study evaluate the implementation of an appropriate thickness of sediment cap in this area of OU1 for the side slopes in adjacent nearshore areas. A Five-Year Review report was completed in 2017 and for a number of reasons, EPA did not evaluate these findings in the report. Ecology suggests EPA acknowledge this fact in RODA and revisit this issue.

5. Final excavation/dredge volume and active remediation area:

In Section 9.2.3 Nearshore Alternative 3 is selected for nearshore remedial action. The preliminary remedial action design indicates to actively remediate approx. 1.6 acre, which is estimated to result in the removal 6,600 CY of contaminated sediments. This removal volume and area are based on the previous remedial investigation effort (mainly TarGOSTdata). As noted in the RODA, additional sampling is needed to reassess areas with mobile and non-mobile non-aqueous phase liquid (NAPL) in the intertidal beaches. Ecology anticipates that significantly more volume/area may need to be remediated after the pre-design sampling effort (as described in Section 13). Please acknowledge that actual volume/area of contaminated sediment to be remediated under Alternative 3 could be significantly more than previously anticipated.

6. Nearshore RAOs:

EPA provided Ecology with redefined/consolidated RAOs (Remedial Action Objectives) for OU1 nearshore cleanup. Ecology supports the general objectives for East Harbor of reducing contaminant concentrations in shellfish to acceptable levels for tribal consumption. Through Nearshore RAO #3 (revised), protection of human health (e.g., tribal consumers of shellfish) from bio-accumulative risks will be measured by comparing market basket tissue concentrations (within limitations of species present at the site) to target tissue concentrations for shellfish. Target tissue levels are based on natural background tissue concentrations.

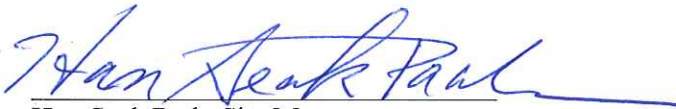
In this RODA, Ecology acknowledges that EPA plans to define the cleanup footprint based on the location of mobile NAPL, and by the sediment cleanup level established for the protection of direct

contact and incidental ingestion by Tribal shellfishers. The relationship between sediment and tissue concentrations at the Site will be further studied during the monitoring period following the remedial actions specified in the RODA. Ecology would like to reiterate that the establishment of a sediment cleanup level based on the protection of the risk driver pathway, which in this case is Tribal consumption of fish and shellfish, should be considered a substantive provision and a minimum requirement in the SMS framework that should be met as an ARAR at all state and federal sites in the final ROD. Information gathered during the post-construction monitoring period will inform this human health risk - based cleanup level for sediment.

Ecology appreciates our collaborative partnership as you have led the preparation of draft RODA (Part I). Ecology understands and fully supports the EPA objectives to complete RODA (Part I) and is looking forward receiving the draft Part II which will describe the remedy selected for upland cleanup.

We look forward to continuing to work with EPA in moving cleanup actions at Wyckoff ahead. Should you have any questions regarding Ecology's comments, please call me at 360-407-7189 or Susannah Edwards (360-407-6798).

Sincerely,



Hun Seak Paul, Site Manager

CC: Barry Rogowski, Department of Ecology, Toxics Cleanup Program

