

Ecopsy



**STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY**

Southwest Region Office

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**Re: Intermediate Basis of Design Report (60 Percent Design) Operable Unit 06- Asarco
Sediments Commencement Bay Nearshore/Tideflats Superfund Site**

Dear Carolyn Huynh and Stephen Lukas.

Thank you for the opportunity to review the Intermediate (60 Percent) Basis of Design Report (BODR). We respectfully submit the following comments. While we understand the intent behind the proposed dredging of the Yacht Basin within OU6 of the Asarco Sediments, Commencement Bay Nearshore/Tideflats Superfund Site, we have significant concerns regarding the project's financial feasibility relative to the limited amount of contamination that would be addressed. This raises substantial questions about whether the proposal meets the MTCA requirement to remove contamination to the maximum extent practicable (RCW 70A.305.030(1)(b)).

Based on the materials provided—including the bioassay results—contamination levels in the project area remain elevated and do not meet applicable biological performance benchmarks, particularly in the Dock C, Dock B, Dock D South, and Dock D North areas (Figure 1-2 in Basis of Design Report), or at sample points YB44, YB33, YB43, and YB42 (Figure 3-6 in Pre Design Investigation Data Evaluation Report). The proposal to remove only the Breakwater Marina docks, which overlie areas with comparatively lower exceedances, is insufficient. This design would leave a substantial portion of the highest contamination in place.

In meetings between Ecology and EPA on 11/18/25, 1/6/26, and 1/9/26 you shared the logistical challenges with dredging the Yacht Basin, namely that broader dock removal and reconfiguration would require complex access agreements and pose engineering and slope stability challenges. We recognize these logistical challenges; however, Ecology cannot support a reduced cleanup without further evaluation of the practicability of dredging or capping in the Yacht Basin.

The Record of Decision (2000) for OU6 states that the entire Yacht Basin (15.5 acres) is to be dredged as part of the selected remedy. In addition, “If all of the contaminated sediment in the Yacht Basin cannot be practicably dredged or if slag is encountered, then the remaining contaminated sediment areas will be capped in place to the extent practicable.” Under the current design only 10 acres of the Yacht Basin would be dredged, about two thirds. This is a substantially smaller mass removal of contamination that may warrant an Explanation of Significant Difference (ESD).

Regardless of whether an ESD is required, EPA should document the evaluation of “practicability” of dredging or capping in the Yacht Basin in order for Ecology to support the reduced cleanup. The evaluation should include:

- Practicability of dredging with dock/boat removal
 - access agreements concerns,
 - engineering constraints,
 - potential damage to vessels currently moored in the harbor,
 - slope stability considerations
- Practicability of other dredge techniques that don’t involve removing docks (e.g., diver assisted suction dredge), and
- Practicability of capping sediment

Without this evaluation, Ecology cannot sign off on the current proposal. In addition, the State cannot justify approval or financial participation in a project that would expend substantial resources without achieving a commensurate environmental benefit.

Thank you for the opportunity to comment. We offer the following additional items for your consideration:

1. **Residual Management Layer- Demonstration of Amendment Effectiveness and Porewater/Recontamination Control:** Ecology requests that EPA provide a site-specific technical demonstration showing that the proposed residual management layer (RML), including any amendments such as granular activated carbon, will be capable of achieving the required reductions in arsenic, copper, lead, and zinc, given the exceedingly high concentrations and bioavailability documented in the pre-design investigation. This demonstration must also address how the RML will prevent upward contaminant migration and long-term recontamination, particularly in areas where porewater concentrations remain above cleanup levels.

A groundwater surface water interface (GSI) porewater sample measured arsenic at 91 µg/L at YB01, and while the proposed dredging may reduce contamination at that location, contamination will still be left in place at other locations where porewater concentrations exceed the ROD cleanup level of 6 µg/L arsenic, including 29 µg/L at GSI-52 and 22 µg/L at YB22. EPA must therefore demonstrate how the amended RML will maintain porewater concentrations beneath the borrow sediment below approximately 3 mg/L arsenic and 11 mg/L copper, as determined in the porewater/groundwater study, and prevent upward flux from these remaining hotspots. Ecology requests that EPA provide the amendment performance testing, amendment selection criteria, long-term contaminant flux modeling, porewater control evaluation, and amendment toxicity testing results, along with a monitoring plan capable of verifying long-term RML performance and preventing recontamination.

2. **Settlement Analysis- Insufficient Evaluation of Sedimentation Processes:** Ecology finds that the settlement analysis provided in Attachment 2 is not adequate for understanding sedimentation processes within the Yacht Basin. The analysis does not sufficiently describe sediment deposition rates, expected post-construction sediment dynamics, or how these processes may influence the long-term performance of the residual management layer and associated restoration features. Additional detail is needed to evaluate whether the proposed design can withstand ongoing sedimentation, recontamination risks, and site-specific depositional patterns.
3. **Propwash-Induced Resuspension and Cap Stability:** Ecology requests that the EPA evaluate the effects of propwash on sediment stability within the Yacht Basin. Published studies demonstrate that propwash can cause significant sediment

resuspension, erosion of caps or residual management layers, and redistributions of contaminated sediments. Given the high levels of arsenic, copper, lead and zinc remaining, EPA must provide modeling and analysis demonstrating that the proposed design will remain protective under expected vessel traffic conditions.

4. **Improve Figures with Clearer and More Explicit Depth of Contamination Information:** Ecology requests that EPA provide additional figures that clearly depict the depth of contamination, as several key figures—such as Figures 2-10, 3-13, and 3-17 from the Pre-Design Investigation, as well as dredge prism Figures 5-1, 6-1, 6-2, and 6-3—do not include depth information. The figures should explicitly distinguish between water depth and sediment depth, as this distinction was not consistently clear in the current submittal. While C-111, C-112, and the dredge prism table contain some of the necessary depth information, these details were difficult to locate because the figures were not presented in color and were not integrated into the primary graphics. More explicit, clearly labeled, and visually accessible figures are needed to support technical review.
5. **Fish Mix Restoration Feature:** Additional details are needed regarding the selection of fish mix as a restoration feature. Is this intended for conservation credit or habitat mitigation? Given the implementation of the Salish Sea Nearshore Programmatic under the Endangered Species Act by USFWS and NOAA, we request that the Washington State Department of Fish and Wildlife evaluate and monitor the fish mix following placement.
6. **Turbidity Curtain Locations:** Please provide a map or plan identifying where turbidity curtains will be installed during dredging.
7. **Post-Dredge Sampling and Stakeholder Engagement:** Please submit post-dredge sample results, including bioassays and schedule additional stakeholder meetings to ensure ongoing communication.

Thank you for your attention to these comments. I look forward to your responses and any updates to the documentation that may follow. If you have any questions, you can contact me at (564) 669-0298 or valerie.chu@ecy.wa.gov.

Sincerely,



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Ecology Site File