From: Morman, Josh (ECY)
To: Tom Graham
Cc: Nathan Soccorsy; Jason Cornetta; Edwards, Susannah (ECY); Hardwick, Ryan (ECY); Winslow, Frank (ECY)
Subject: Draft EDR Ecology comments
Date: Thursday, July 3, 2025 4:50:52 PM

Hello Tom,

Below are the draft EDR comments Ecology discussed at our check in meeting earlier today. We will be providing these comments along with the draft EDR to interested tribal and regulatory entities for their subsequent review. Normally this would happen after we receive a new draft addressing our comments, but for the sake of an expedited schedule we are sharing them now. As such Ecology may have more comments in the future. Please let me know if you have any questions or concerns.

Thanks,

Josh

General Comment – Shoreline Slopes

Proposed shoreline slope modifications presented within the EDR need to be clarified. The slope of the shorelines may be modified where currently too steep. Some detail sections are needed to show the difference between existing slopes and final slopes. In general, Ecology's concern is that the modification of shoreline slopes should not result in materials being move seaward where there is more potential for contaminated soils to enter the marine environment. For example, contamination in soil that is previously unsaturated may have more potential for contamination migration if they are pushed to a lower elevation where they become saturated, either part of the time, or all of the time. Such detail sections will help to assess how much soil will need to be moved. The next questions becomes where such soils will be moved to. Both South Shore and Logway detailed shoreline sections showing current and post armoring profiles would be appropriate.

General Comment – EMNR Thickness

The EDR specifies clean material placed for EMNR have a thickness of at least 6in. In a previous meeting, Ecology had expressed concern that the boundary between SMA3 and SMA 2 could have been characterized more and had proposed adding extra clean material at this boundary (12in minimum thickness). The EDR did not include that proposal. Ecology wants to ensure that the site meets both benthic and human health criteria for the COCs and cPAHs, keeping in mind that the post construction monitoring will be characterizing to the point of compliance (12 in below mudline).

Specific Comments

Section 3.2.1 – Assumed Source Areas – Stormwater Work

The EDR States: "The stormwater cleanup actions are being completed as part of the upland remediation project and details regarding that effort will be included in the upland EDR (to be provided by others). We understand this work will be conducted by others. Property owners and their leasees are responsible for obtaining permits and compliance with stormwater regulations

associated with all upland industrial use areas at the Site." The highlighted sentence could be interpreted to indicate that stormwater line clean out work is the responsibilities of others (not Jeld Wen). Please revise to make this more clear.

Section 5 – Construction Best Management Practices

This section mentions BMPs in Appendix D. The Appendix with BMPs is Appendix E.

Section 6 – Net Environmental Effects

Compensatory mitigation measures replace the unavoidable loss of habitat/aquatic resource function and area, including temporary losses. While this section identifies unavoidable impacts that will occur to implement the remedy, such as the (presumed temporary) loss of estuarine wetlands, it does not present measures to compensate for the impacts. Compensatory mitigation (e.g. rebuilding, maintaining, and monitoring) for unavoidable impacts to estuarine wetlands and other resources should be considered; additional consultation with applicable Tribes and regulatory entities is needed to determine the scope of compensatory mitigation. A compensatory mitigation plan for those resources may be required. For example, that plan would specify when nest excluders would be installed (e.g. before Feb. 2026, if work is expected to begin summer 2026) and/or where/how an alternative nesting site would be created if the nesting site is destroyed.

Separately, Ecology suggests stating in Section 6 that measures to avoid and reduce impacts to target resources are identified in multiple sections of the document, such as Sections 9, 11, and 12 (i.e. work windows, sequencing, and methods).

Section 8.4.4 – Enhanced Monitored Natural Recovery – Material Size Specifications

The EDR states: "The EMNR layer consists of a nominal 6-inch-thick layer of clean silty sand/gravel cover that will tie into the backfill for excavated areas." A more precise material specification (e.g. D_{50}, min and max grain size) is needed in this section. Such specification should consider both stability and suitability for habitat. Ideally, the EMNR material specification should be satisfactory to various stakeholders interested in improving habitat conditions in the area. We recognize that specifications may need to be adjusted based on available materials, but should start with the specification for the ideal material.

Section 8.5 – Shoreline Stabilization and Armoring – Material Size Specifications

Please include the approximate min and max diameter specifications in addition to the D_{50} values provided in this section. A table is anticipated to be helpful for this.

Section 8.5 – Shoreline Stabilization and Armoring - Base Material for Armoring

A base material for the shoreline armoring of D_{50} 3/8 inch is proposed for the Logway and D_{50} 3 inches proposed for the South Shore. A D_{50} 3 inch base is not anticipated to be sufficient to stop suspended solid transport within the armor pores. A 3/8 inch base layer would have significantly less potential for suspended solids migration, but a geofabric should stop all suspended solids migration. Please consider the addition of a geofabric for the prevention of suspended solids migration. Prevention of suspended solids migration is a critical element of

erosion protection at the Site in addition to wave energy dissipation by the coarse rip rap rock. At the minimum, a base layer of D_{50} 3/8 inches is needed beneath the D_{50} 3 inch layer at the South Shoreline if no geofabric is used.

Section 8.5 - Shoreline Stabilization and Armoring - Armor Base Material Thickness and Slope

Ecology is concerned with the placement of a six inch thick base layer on a steeply sloped shoreline 3H:1V South Shore and 2H:1V Logway. Thickness of six inches may be difficult to maintain on a steeper slope. Please clarify how such thickness will be maintained, and if there are measures to prevent sloughing of placed materials prior to applying the top armoring layer.

Section 8.5 - Shoreline Stabilization and Armoring – Reference to Bank-Area Samples

Section 8.5 state, "Upland bank-area samples are being collected to support the decision for placing armor as a source control measure." Does this refer to the previously provided dioxin/furans (DFs) in soil data that has been collected? If so, please update this discussion.

Section 9 – Compliance Monitoring

This section states: "Requirements for compliance monitoring will be further established in the OMMP and the Construction Quality Assurance Project Plan to be submitted to Ecology with the 60% Construction Plans and Specifications as presented in the AO schedule of deliverables." Ecology notes that per schedule discussions we do not want to wait for the 90% design for receipt of these documents.

Section 12 – Ongoing Design Considerations

The EDR stated: "Contaminate characterization of shoreline bank areas (in progress) to determine if additional shoreline armor will be required". Please clarify this bullet and update as appropriate.

Figure 12

The EMNR prism includes area outside the site boundary. Ecology doesn't have an issue with the placement outside the site boundary at this area if it improves constructability but wants to ensure this area isn't used in the calculation for the expected post remedy cPAH SWAC value of 19.97ppt. Additional area within the site boundary may need to be selected to reach the expected cPAH SWAC if that area was included in the calculation.

Appendix E 1.7 – Structure Removal, Handling, Disposal

Appendix states: "Reasonable attempts will be made to completely remove the piling in its entirety; however,
pile cut-off will be an acceptable alternative where vibratory extraction or pulling is not feasible, as described as follows. In addition, if a pile is broken or breaks during vibratory extraction, the contractor will employ the following methods:
– A chain will be used, if practicable, to attempt to entirely remove the broken pile.
– If a pile cannot be removed or breaks off at or near the mudline in SMA-1 or SMA-2, then the pile will be cut off using a chainsaw approximately 12 inches below the

mudline. Areas where piles are cut off will be capped with 12 inches of organoclay-amended sand to contain any remaining contamination associated with the pile."

Ecology's SCUM document states in section 16.3.2.1 that "**In intertidal habitat, cut the piling at least 3 feet below the existing mudline or final grade. Cut it even lower if the area is subject to beach profile changes." Since all pilings are within the intertidal zone they should be cut 3 ft below mudline if full extraction isn't possible.**