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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Southwest Region Office
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May 8, 2024

Matthew Dalton
Dalton Olmsted Fuglevand, Inc.
1236 NW Finn Hill Road
Poulsbo, WA 98370
mdalton@dofnw.com

Re: Department of Ecology Comments – Revised Remedial Investigation/Feasibility Study Report, dated February 20, 2024:

- **Site Name:** Tacoma Metals Site-General Metals Remedy Performance Area (RPA)
- **Site Address:** 1919 E Portland Ave Tacoma, 98421
- **Facility/Site ID:** 1257
- **Cleanup Site ID:** 3910
- **Agreed Order:** DE 17989

Dear Matthew Dalton:

The Washington State Department of Ecology (Ecology) has reviewed the Revised Remedial Investigation/Feasibility Study (RI/FS) Report, prepared by Dalton, Olmsted, & Fuglevand (DOF), received on February 21, 2024. After our review, Ecology has the following comments:

- **Pg 68-71 References** Ecology does not have a copy of this document. Please send an electronic copy for our records.

DOF, 2022a. Memorandum to Regional Administrator – EPA Region 10 Re: Self-Implementing Cleanup Notification, Pilot Scale Testing – Metal Stabilization, Bulk PCB Waste Material (Soil), Tacoma Metals Site, Tacoma, Washington. June 17.

- **Pg 62 20.2.5 Resilience to Climate Change**

Climate resilience section requires a more thorough evaluation according to the new regulations in WAC 173-340-350(6)(f). Based on conducting a general screening from Ecology's

Climate Change Resilience and Green Remediation guidance document¹, there appears to be potential vulnerabilities for the Site. According to the Washington SEA Grant probabilistic sea level rise projections, FEMA flood plain maps, and University of Washington Climate Impacts Group projections of Puyallup River flooding, the Site is vulnerable to sea level rise since it is in the tide flats and increasing risk of flooding from the Puyallup River, resulting in high likelihood of coastal flooding and groundwater rise. A site-specific vulnerability assessment should be done to identify how sea level rise, coastal inundation and flooding, and groundwater rise may affect the proposed remedy.

We recommend using the following University of Washington Climate Impacts Group (UW CIG) tools to evaluate sea level rise and flooding projections (it works best to use Google Chrome to open the tools):

- Washington SEA Grant probabilistic sea level rise projections using the University of Washington Climate Impacts Group Interactive Sea Level Rise Data Visualization tool (a maximum 50% probability of sea level rise should be used in the evaluation):
<https://cig.uw.edu/projects/interactive-sea-level-rise-data-visualizations/>.
 - This sea level rise projections visualization tool specific to the Tacoma Tide Flats can be viewed here:
<https://public.tableau.com/app/profile/univ.of.washington.climate.impacts.group/viz/SeaLevelRiseVisualizationTable2/Dashboard1?Latitude=47.3&Longitude=-122.4>
- NOAA Sea Level Rise Viewer to visualize coastal inundation due to sea level rise:
[Sea Level Rise Viewer \(noaa.gov\)](https://www.noaa.gov/sea-level-rise-viewer)
- Precipitation Projections for Stormwater Planning tool to evaluate and visualize the project changes in heavy rainfall events for this area:
<https://cig.uw.edu/projects/heavy-precipitation-projections-for-use-in-stormwater-planning/>
- Visualization tool to evaluate projections for peak streamflow and return intervals for the Puyallup River: <https://data.cig.uw.edu/climatemapping/>
- Federal Emergency Management Agency (FEMA) floodplain maps to further evaluate current flood risks: <https://msc.fema.gov/portal/home>

¹ January 2023, Sustainable Remediation: Climate Change Resiliency and Green Remediation-A Guide for Cleanup Project Managers, Publication number 17-09-052, A guide for Cleanup Project Managers to: Increase resiliency of cleanup remedies to climate change impacts -and Increase benefits and reduce impacts from the MTCA Cleanup Process Toxics Cleanup Program Washington State Department of Ecology Olympia, Washington.
<https://apps.ecology.wa.gov/publications/SummaryPages/1709052.html>

Using the climate change projection tools listed above, the following information should also be evaluated:

- Obtain additional information from the Army Corps of Engineers on how the levee was engineered along the Puyallup River. Was the levee engineered to be resilient to projected sea level rise, projected flooding, and more extreme storms events? How could the remedy be impacted if the levee breached during extreme flood events? How will the remedy be impacted using a 1:1 sea level rise/ groundwater rise scenario? Is there a potential for seawater intrusion and changes in groundwater geochemistry?
- **20.6 MTCA Disproportionate Cost Analysis (DCA)**

Environmental Health Disparities: Vulnerable Populations and Overburdened

Communities We recommend including the Environmental Health Disparities and potentially exposed populations in the RI/FS. General Metals and International Paper should collaborate in this section.

According to Ecology's Implementation Memorandum No, 25², the following criteria and resources are used to determine whether the potentially exposed population includes a likely vulnerable population and overburdened community:

1. The potentially exposed population is located in a census tract that ranks a 9 or 10 on the Environmental Health Disparities Index from the Washington State Department of Health's EHD Map³;
2. The potentially exposed population is located in a census tract that is at or above the 80th Washington state percentile of the Demographic Index from the U.S. Environmental Protection Agency's EJ Screening tool⁴; or
3. The potentially exposed population is located in a census tract that is at or above the 80th Washington state percentile of the Supplemental Demographic Index from the U.S. Environmental Protection Agency's EJ Screening tool.

² January 2024, Ecology, Implementation Memorandum No. 25: Identifying Likely Vulnerable Populations and Overburdened Communities under the Cleanup Regulations, Publication Number 24-09-044"

<https://apps.ecology.wa.gov/publications/SummaryPages/2409044.html>

³ Website for DOH EHD Map: <https://fortress.wa.gov/doh/wtnibl/WTNIBL/>

⁴ Website for EPA EJScreening tool: <https://www.epa.gov/ejscreen>

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Re: Tacoma Metals Site-General Metals Remedy Performance Area (RPA)
CSID: 3910

If you have any questions regarding Ecology's comments, please contact me at 360-819-0460 or john.pearch@ecy.wa.gov.

Sincerely,



John Pearch, LHG
Cleanup Site Manager/Hydrogeologist
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