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DEPARTMENT OF ECOLOGY

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March 08, 2022

Kristine Koch, Project Manager, Cleanup Section #3
U.S. EPA, Region 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101
koch.kristine@epa.gov

Re: Washington State Department of Ecology's concerns with EPA's partial deletion from the National Priorities List for the Commencement Bay/Nearshore Tidelands Superfund site.

- **Site Name:** Commencement Bay Nearshore Tidelands
- **Site Address:** Commencement Bay, Tacoma, WA
- **Facility/Site ID:** 42
- **Cleanup Site ID:** 3032

Dear Kristine Koch:

Staff at the Environmental Protection Agency Region 10 (EPA) have discussed with Washington State Department of Ecology (Ecology) Toxics Cleanup Program staff, the proposed partial deletion from the National Priorities List for the Commencement Bay/Nearshore Tidelands Superfund site. The partial deletion includes the Thea Foss Waterway, Wheeler-Osgood Waterway, and Middle Waterway Problem Areas, and the Olympic View Resource Area within Operable Unit 01-Sediments and Operable Unit 05-Sediment Sources. We understand that EPA will be requesting the State of Washington to concur with the delisting decision.

Where we have Agreement

We would like to thank you and your team for working with Ecology staff to answer our questions on EPA's approach and resolve our concerns with the decision to delist. Based on the January 4, 2022, meeting between our agencies and your February 8, 2022, follow-up letter (enclosed), Ecology understands there is agreement between our agencies that EPA will commit to the following actions:

1. Thea Foss/Wheeler-Osgood Waterways Sediment Monitoring:

- a. Amend the City of Tacoma's 2018 Long-Term Monitoring Plan for the Thea Foss and Wheeler-Osgood Waterways Remediation Project (2018 LTMP) to ensure continuing surface sediment monitoring is done for the head of the Thea Foss Waterway by either the Potentially Responsible Persons or EPA. EPA has reached out to the City of Tacoma on this issue and will continue to keep Ecology updated on future discussion.
- b. Ensure long-term sediment monitoring (i.e., Waterway Source Monitoring) under the 2018 LTMP will continue until performance standards are met, as defined in Consent Decree C03-5117 (Commencement Bay Sediment Quality Objectives). In addition, the remaining monitoring in the 2018 LTMP will continue in perpetuity.

2. Thea Foss/Wheeler-Osgood Waterways Source Control:

- a. Ensure the requirements of the Stormwater Work Plan Addendum to the Consent Decree remain in effect and continue to be enforced by EPA until performance standards are met.
- b. Consult and seek concurrence from Ecology (Toxics Cleanup Program and Water Quality Program) prior to modifying any City of Tacoma requirements for stormwater source control, stormwater monitoring, or long-term sediment monitoring.

3. Middle Waterway Sediment Monitoring and Contingencies: Ensure further surface sediment monitoring for mercury is done for Middle Waterway in all areas that failed SMS benthic criteria for mercury. EPA will consult with Ecology to develop the monitoring plan and develop contingency actions. The monitoring will be conducted by either the Potentially Responsible Persons or EPA and we further request that the monitoring be completed before the 2024 periodic review.

4. Public Engagement: Ensure the public has opportunity to engage with EPA ahead of the public comment period and allowed to ask questions and discuss issues on the proposed partial deletions.

5. Tribal Engagement: Conduct meaningful engagement with the tribes that claim a Usual and Accustomed Fishing Area in Commencement Bay.

6. Environmental Justice: We understand EPA has conducted an environmental justice screening and will provide outreach materials in appropriate languages. We request that EPA continue to keep this overburdened community in mind during decision making and community outreach as the partial deletion progresses, as well as other cleanup work in Commencement Bay.

- 7. Local Agencies Engagement:** In the February 8, 2022, letter, EPA agreed to consult with local agencies such as Tacoma-Pierce County Health Department (TPCHD). We would encourage EPA to ask TPCHD to participate in public outreach meetings so that they can answer questions and provide information about the ongoing institutional controls for fish consumption and fish consumption advisories.
- 8. Ecology Review:** Provide advance opportunity for Ecology to review and comment on EPA's fact sheets, press releases, or other public documents on the partial deletions.

Where We Need Further Discussion

We discussed additional concerns at our January 4, 2022, meeting that are not addressed in EPA's February 8, 2022, follow-up letter. It is Ecology's understanding that our agencies reached general agreement on these concerns during the January 4 meeting, and we request that EPA confirm and/or clarify our understanding on the following:

1. Sediment Management Standards Benthic Criteria:

- a.** For future sediment sampling, sediment chemistry results for all chemicals of concern (e.g., mercury, PAHs, phthalates, Total PCB Aroclors) will be compared to the Sediment Management Standards (SMS) benthic criteria in WAC 173-204-562, Table III and the Sediment Cleanup User's Manual, Table 8-1.
- b.** The sediment chemistry results can be 1) total organic carbon normalized and compared to the SMS Sediment Cleanup Objective (SMS-SCO); or 2) dry weight-based and compared to the Lowest Apparent Effects Threshold in the Sediment Cleanup User's Manual Table 8-1 which is equivalent to the SMS-SCO.
- c.** Bioassays will be analyzed for each sampling station that exceeds the SMS-SCO or LAET, depending on which criteria are used. The bioassay protocols and interpretation criteria will be based on the Sediment Cleanup User's Manual (Chapters 4, 5, and 8). In the February 8, 2022, letter, EPA agreed to do this for Middle Waterway and we request this be extended to all areas proposed for de-listing.

- 2. Contingency Actions:** Work with Ecology to identify contingency actions for Thea Foss Waterway/Wheeler-Osgood Waterway if monitoring results show SMS benthic standards are exceeded. In the February 8, 2022, letter, EPA agreed to do this for Middle Waterway and we request this be extended to all areas proposed for de-listing.

3. Human Health: Remove language from the Site-Specific Justification for Partial Deletion document regarding Total PCB Aroclors and compliance with human-health based standards. Ecology has remaining concerns about the approach for protection of human health. We request that our agencies and the Puyallup tribe further discuss certain aspects (e.g., selection of fish species, risk levels, etc.) in the context of the entire Sediment Operable Unit of the Commencement Bay Nearshore/Tideflats Superfund site. In addition, EPA will ensure the English Sole tissue monitoring report and risk assessment conclusions are made available for review, which includes Ecology and the Puyallup tribe.

We believe that if all of the above concerns were resolved, it will address and mitigate concerns that Ecology has with the partial deletion of the Commencement Bay/Nearshore Tideflats, and will help place the state in a position to concur with EPA's action. Please feel free to contact me at (360) 790-2231 or rebecca.lawson@ecy.wa.gov for further discussion or questions.

Sincerely,



Rebecca S. Lawson, P.E., LHG
Section Manager
Toxics Cleanup Program
Southwest Regional office

Enclosure (1) EPA, Follow-up letter, February 8, 2022

By certified mail: 9489 0090 0027 6066 7251 81

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Ecology Site File

Enclosure A

EPA, Follow-up letter, February 8, 2022

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

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SUPERFUND &
EMERGENCY
MANAGEMENT DIVISION

February 8, 2022

Rebecca S. Lawson, PE, LHG
Southwest Region Section Manager
Toxics Cleanup Program
Washington State Department of Ecology
P.O. Box 7775
Olympia, WA 98504-7775

RE: Proposed partial deletion of Thea Foss, Wheeler Osgood, Middle Waterway, Olympic View Resource Area within the Commencement Bay Nearshore/Tideflats Superfund Site from National Priorities List

Dear Ms. Lawson:

The EPA has requested Ecology's concurrence for EPA's proposed partial deletion of the Commencement Bay/Nearshore Tideflats (CB/NT) Superfund site from the National Priorities List. This includes the Thea Foss, Wheeler-Osgood, Middle Waterway Problem Areas, and the Olympic View Resource Area within two operable units: Operable Unit 01-Sediments (OU-01) and Operable Unit 05-Sediment Sources (OU-05).

On January 3, 2022, Ecology provided a discussion paper for a meeting on January 4 between Ecology and EPA to discuss Ecology's concerns and questions regarding the proposed partial deletion. EPA provided draft responses on January 4 prior to the meeting to further facilitate the discussion. EPA has since modified some of those responses and is providing the following official responses to the concerns and questions Ecology expressed in their issue paper.

Issue 1: Ecology questions the rationale for deleting certain waterways from the NPL instead of waiting until the overall CBNT site is ready for deletion.

1. Ecology would like to better understand the purpose of deleting some parts of the overall CB/NT site before the overall site is ready for deletion. What is the benefit to deleting these waterways sooner than the overall site?

EPA Response: The Partial Deletion Rule, which allows the EPA to delete portions of NPL sites, provided that deletion criteria are met, was published in the Federal Register on November 1, 1995 (65 FR 55466). Previously, EPA's policy had been to delete sites only after cleanup of the entire site has been completed. However, waiting to delete an entire site does not communicate the successful cleanup of portions of the site. Total site cleanup may take many years, while portions of the site may have been cleaned up and may be available for productive use. Such a portion may be a defined geographic area of the site, or may be a specific medium at the site, e.g., surface soil, depending on the nature or extent of the release(s).

The CB/NT Site consists of seven operable units. To wait until all of these are completed may take over 100 years – especially operable unit 3 (Tacoma Tar Pits). It has already been 40 years since the listing of this site, and it is important to show the public that EPA and Ecology have been working with PRPs to get this site cleaned up.

2. There is concern with using a partial deletion process at a site where one of the key elements of the site cleanup is to protect human health via the fish consumption pathway. Sediment cleanup for fish protection is regulated on a site-wide basis, so it is unclear how the fish pathway applies to these partial deletions. We believe that EPA’s partial deletion justification should state EPA’s position on institutional controls and fish advisories, and how the partial deletion may affect these.

EPA Response: The partial deletion justification does state that all institutional controls are in place. These will be evaluated during each five-year review to evaluate their protectiveness. The fish advisory is administered by TPCHD. The partial deletion has no bearing on the fish advisory as the cleanup goal for fish is to background (a reference station) rather than to a risk-based concentration. However, the resulting residual risk for PCBs is calculated to be 4×10^{-5} based on a tribal fisher scenario (RME), which is within EPA’s acceptable risk range.

3. With a partial deletion process, how will EPA explain the decision to the public, and engage their feedback before the decision is finalized? Ecology believes it could be confusing to the public and stakeholders to learn that only part of the larger site is “done”, without understanding the big picture and plans for deletion of the entire site.

EPA Response: EPA is prepared to explain to the public that in this portion of the Site, the remedy is complete and cleanup levels in sediment have been attained; however, there will be continued monitoring and maintenance of areas where waste was left in place (under caps and in CDFs) and constructed habitat areas. EPA has already partially deleted two areas of the Site in 1995 – Blair Waterway and St. Paul Cap. EPA is preparing to notify the public in advance of the public comment period and have a public meeting to explain this process.

4. To go through multiple partial deletion processes, instead of deleting the site as a whole, can create additional workload for EPA, tribes, and state agencies, as well as additional effort on the part of the public. Will the benefit from a partial deletion offset this increased workload?

EPA Response: EPA believes that it is important to inform the public of the progress being made at this site. A lot of work has been conducted and the public should know where the cleanup work is complete and where the cleanup work is continuing. This is only the second partial deletion of this site in 28 years, so the added workload in that timeframe is not significant. EPA is working to combine as many areas of the Site together as possible at a time to decrease this workload. Further, EPA only allows one partial deletion per site per year, although it is unlikely that any the remaining parts of the Site will be partially deleted until 2023 at the earliest (areas under consideration are Sitcum WW, Milwaukee WW, Asarco Breakwater Peninsula, and Ruston/N. Tacoma Study Area).

5. Would a partial deletion process here set a precedent for this approach at other sites that have other technical concerns (like the potential for recontamination between a deleted and ongoing operable unit)?

EPA Response: This precedent has already been set by other Superfund sites across the nation. Many NPL sites have used this process since 1995.

Issue 2: Potential Tribal concerns.

Ecology has an obligation and commitments to work on a government-to-government basis with Washington tribes. The Puyallup Tribe has very strong interests in environmental protection in Commencement Bay, which is part the tribe's usual and accustomed fishing grounds. Other tribes may have an interest as well. Before considering concurrence for partial deletions of any NPL site, Ecology needs to understand tribal concerns.

EPA Response: EPA has offered both the Puyallup and Muckleshoot Tribes the opportunity to consult on the partial deletion. EPA has a MOA with the Puyallup Tribe. Commencement Bay is not only U&A fishing grounds, but also has tribal lands of the Puyallup Tribe that run through the Site. The areas being partially deleted are not within the tribal land boundary but are within the U&A area. EPA has coordinated with the Puyallup Tribal staff on the partial deletion and are working with them to set up a formal government-to-government consultation between EPA and Tribal leadership.

Issue 3: Need for meaningful public engagement before deletion.

1. Ecology believes that robust and meaningful public engagement must occur prior to the public comment period for any deletion. CB/NT is one of the largest and longest standing NPL sites in Washington. The cleanup has involved many phases of investigations, remedial actions, and monitoring. The public needs to have an opportunity to fully understand what has been achieved, to ask questions and express concerns. EPA should consider the public concerns well before making the decisions about proposing to delete parts or all of the site.

EPA Response: EPA is preparing to inform the public of the intent to partially delete the Site prior to the public comment period to allow the public time to review the AR materials. EPA is also planning a public meeting prior to the public comment period to answer questions the public may have about the partial deletion. The purpose of the public comment period is for the public to express their concerns or support for the partial deletion. EPA will consider all comments before making a final decision and will provide a responsiveness summary. However, it is difficult for EPA to plan these events without knowing Ecology's timing or intent to concur with the partial deletion.

2. In addition to the general public, local agencies such as Tacoma-Pierce County Health Department should be consulted for input prior to EPA deletion decisions.

EPA Response: EPA agrees. Local agencies are included in EPA's communication plan for the public comment period.

3. Ecology requests the opportunity to review and comment ahead of time on EPA's fact sheets or press releases related to NPL deletion.

EPA Response: EPA is willing to share all public materials with Ecology prior to release. EPA will consider all comments provided in a timely manner. EPA will inform Ecology of when comments are needed; however, EPA needs to understand Ecology's schedule for concurrence prior to making any commitments and scheduling any events.

Issue 4: Environmental Justice

EPA should engage with and evaluate the impact of the partial delisting on communities that have been historically marginalized, overburdened, and underserved. Considerations for these communities should be explicitly included in any NPL deletion decisions.

EPA Response: The partial deletion process is not like a Proposed Plan that is making a cleanup decision. The deletion is just the administrative process documenting that the cleanup has been completed as per the ROD. The process includes a formal public comment period and all comments received will be thoroughly reviewed and responded. EPA has conducted an EJ screen and will provide materials to include Spanish, Vietnamese, and Korean communities; however, EPA is not aware of any specific communities with EJ concerns associated with these sites. As explained above the EPA is working directly with the Puyallup and Muckleshoot Tribes in our government-to-government relationship.

Issue 5: EPA-Sediment Quality Objectives (EPA-SQOs) are inconsistent with the SMS benthic criteria.

For some chemicals, the EPA-SQOs in the ROD are not consistent with the SMS Sediment Cleanup Objective benthic criteria (SMS-SCO), which is the sediment quality goal in the SMS. Instead, several of the EPA-SQOs are set at the higher SMS Cleanup Screening Level (SMS-CSL). This is an issue because surface sediment concentrations for some chemicals, which pass the SQO, exceed the SMS-SCO.

EPA Response: The SQOs fall within the regulatory range of the SMS considering the trade-off of net environmental effects, cost, and technical feasibility. Thus, it was concluded by PTI in 1992 that the SCO for Commencement Bay are as protective of human health and the environment as the SMS. In addition, despite the variations in approach to obtaining the numerical values, the Ecology found the numerical values for active remediation in Commencement Bay acceptable in 1992. Ecology agreed that the SCO fall acceptably within the range of sediment quality standards (SQS) and minimum cleanup levels (MCUL). However, Ecology noted that the Commencement Bay ROD did not directly consider sediment recovery zones for those areas that were actively remediated, but do not meet the SCO (because of technical impracticability). Following active cleanup the SMS requires the establishment of a sediment recovery zone in order for sediments that exceed the SQS to meet the long-term goal at a future date. Some of the substantive requirements of SMS that Ecology request to be considered were:

- analysis of total organic carbon,
- incorporation of the cited bioassays, and
- sediment recovery modeling.

EPA has required analysis of total organic carbon in all sampling events. EPA can require additional bioassays without having to reopen the ROD. Further, EPA does not do sediment recovery modeling post-cleanup as actual monitoring is required to ensure that cleanup goals are achieved.

Issue 6: Remaining exceedances of both the EPA-SQOs and SMS-SCO/CSL.

Sediment chemical exceedances remain above EPA and SMS benthic standards in some areas. EPA has concluded that the exceedances are due to recontamination from the City of Tacoma's NPDES-permitted stormwater discharges. If the partial deletion moves forward, Ecology requests:

1. Stormwater source control requirements from the Stormwater Work Plan Addendum to the Consent Decree Scope of Work remain in effect and continue to be enforced by EPA until the performance standards (i.e., EPA-SQOs) are met.

EPA Response: EPA agrees, and this requirement will remain in effect until the cleanup goals in the Thea Foss are achieved. Should EPA consider ceasing this requirement, it will seek concurrence from Ecology prior to taking any actions.

2. Long term sediment monitoring required under Thea Foss and Wheeler-Osgood Waterways Remediation Project 2018 Long-Term Monitoring Plan (Thea Foss LTMP) will continue until the performance standards are met.

EPA Response: EPA assumes that Ecology is referring the Waterway Source Monitoring requirements in the City's 2018 LTMP. EPA agrees that these requirements will remain in effect until the SQOs are achieved throughout the waterway. The remaining monitoring required in the 2018 LTMP will continue in perpetuity.

3. Regardless of the partial deletion status, EPA will require City of Tacoma to amend the Thea Foss LTMP to add surface sediment monitoring stations within the Head of Thea Foss Waterway.

EPA Response: EPA has already reached out to the City of Tacoma regarding this request. EPA will keep Ecology apprised of these discussions as they progress.

Issue 7: EPA-Tacoma CD/Ecology Municipal Stormwater General NPDES permit (MSWGP)/303d listing nexus.

If EPA were to eventually determine that City of Tacoma has fulfilled its commitments for stormwater source control and monitoring for Thea Foss Waterway, potential regulatory gaps could result. This is because: 1) the MSWGP provides options for stormwater monitoring, whereas the EPA/City Consent decree requires the monitoring; 2) the MSWGP requires municipalities to report known exceedances of state water quality standards (including sediment standards), and to develop a plan to address the exceedances, unless another regulatory program (i.e., Thea Foss CD Stormwater Addendum/CERCLA actions) is already in place; 3) the current status of Thea Foss Waterway on the state Water Quality Assessment indicates the water body is impaired, but there is an action plan in place to address the

exceedances (i.e., CERCLA action). Because of the intertwining of these programs with the EPA requirements under the city of Tacoma Consent Decree, Ecology requests:

1. EPA consultation with Ecology’s Toxic Cleanup Program and Water Quality Program prior to modifying any City of Tacoma requirements for stormwater source control, stormwater monitoring, or long-term sediment monitoring.

EPA Response: EPA agrees to consult and seek concurrence from Ecology prior to taking any actions regarding ceasing this requirement.

Issue 8: The Middle Waterway conclusions for mercury exceedances are inconsistent with the SMS.

The Year 10 monitoring conducted in 2014 shows mercury exceeded the EPA-SQO (and SMS-CSL) at several sampling stations, which indicates recovery is not occurring as predicted. The EPA determined that these mercury exceedances did not pose a biological threat. This conclusion was based on an extrapolation of bioassay results that passed the SMS—but the samples were taken prior to the remedial actions and from stations located in a different area of Middle Waterway with similarly elevated levels of mercury. This is inconsistent with the SMS which requires compliance with benthic standards for each sampling station.

In addition, the 2005 sampling in the lower intertidal portion of the Additional Remedial Action area showed significantly elevated mercury at one station. In response, a thin layer of sand was added in 2013 to enhance natural recovery. This was monitored once in 2015 which is not sufficient to determine if the area is recovering. To address this concern, Ecology requests that EPA administer the following requirements:

1. Additional surface sediment monitoring for mercury at several locations in Middle Waterway in time to inform the 2024 five-year review. Samples should be from stations with the highest mercury concentrations based on the 2014 monitoring results, and from the enhanced natural recovery portion of the Additional Remedial Action area (even though not elevated in 2014).

EPA Response: The area in Middle Waterway where mercury exceeds the SQOs in the ROD was determined in Remedial Design to be a natural recovery area as the epibenthos was stage 3 and the bioassays passed at the highest concentration. However, post construction monitoring has shown that the mercury concentrations in this area remain unchanged and have not recovered and no additional bioassays have been conducted on these samples. EPA agrees this is an important data gap to fill and will require the PRP group to collect the samples **should Ecology require this sampling in their concurrence letter.** EPA would like to work with Ecology staff to agree on which stations should be sampled. EPA will copy Ecology on communications with the PRPs on this requirement.

2. Require the full suite of SMS bioassays for each sampling station that exceeds the EPA-SQO of 0.59 ppm, (or the SMS-SCO of 0.41 if possible).

EPA Response: EPA agrees with this request and will require this for the next FYR should Ecology require this sampling in their concurrence letter.

3. Require additional remedial actions in areas that fail the SMS biological criteria, which may include a thin-layer cap.

EPA Response: Based on the results of the additional sampling and analysis, EPA will consult with Ecology on additional actions that are required by the FYR. EPA believes that addition of a thin-layer cap may be reasonable in areas that are not meeting the SQOs and SMS biological criteria.

4. Work with Ecology to develop a monitoring plan and identify contingency actions.

EPA Response: EPA is willing to work with Ecology to develop a monitoring plan and identify contingency actions as long as it is conducted in a timely manner to meet the 2023 sampling event for the next FYR.

Issue 9: EPA should identify the legal framework for requiring PRPs to conduct additional monitoring or actions if partial deletions move forward

In discussions between EPA and Ecology staff, EPA has indicated it would require PRPs to conduct the additional sampling and actions requested by Ecology in Issue 7 and 8. Ecology would like to understand the legal mechanisms for EPA to require the parties to conduct this additional work after ROD requirements are deemed to have been met.

EPA Response: EPA already has the legal framework in place to require the additional sampling. The CDs all have statements that the PRPs are to provide any information EPA requires for the FYR.

Issue 10: Human health standards are inconsistent with the SMS.

The human health seafood consumption exposure pathway risk parameters and process for establishing a protective risk-based concentration for screening chemicals of concern or establishing the EPA-SQO are not protective enough for the following reasons:

1. The risk-based concentration should be based on:
 - a. A reasonable maximum exposure scenario based on tribal consumption of fish and shellfish which includes both current and potential future tribal use of the site.

EPA Response: At the request of the Puyallup Tribe, the RME for the 1997 ESD for PCBs was based on the tribal consumption of fish and shellfish.

- b. A risk level of 1×10^{-6} for individual carcinogens and hazard quotient of 1 for non-carcinogens (WAC 173-204-561(2)(a)).

EPA Response: Risk-based concentrations are not achievable in urban watersheds. EPA and Ecology both chose the background station (Carr Inlet) to be used to achieve appropriate cleanup goals for this Site. As PCBs were the only contaminant posing unacceptable risk to humans from consuming fish and

shellfish, the resulting residual risk is 4×10^{-5} , which is within the acceptable risk range specified in the NCP and below the residual risk estimated in the 1997 ESD.

- c. Bulk sediment cleanup levels. The SMS does not allow a tissue-based cleanup level (WAC 173-204-560(1) and 173-204-560(7)(a)). Sole reliance on a tissue-based value to verify compliance with the Total PCB Aroclor EPA-SQO is inconsistent with the SMS.

EPA Response: EPA is relying on the PCB SQO for sediment, which is less than 300 ppb (point-by-point). In addition, the site-wide fish tissue was to be reduced to the concentrations found in the reference station (Carr Inlet). Both of these have been achieved in the partial deletion area.

- d. Total PCB congeners rather than Total PCB Aroclors.

EPA Response: PCB congeners are used to assess dioxin-like risk. The cancer slope factor for PCBs is based on PCB Aroclors and the RI/FS and baseline risk assessments were all conducted using PCB Aroclors and the ROD SQO is based on PCB Aroclors. There is no need to utilize congener analysis by EPA Method 1668 because Method 8082 provides sufficiently low detection limits for this purpose. Total PCB concentrations based on a sum of congeners are lower than the total PCB Aroclor data which would result in lower residual risk. The PRPs analyzed the fish tissue for PCB congeners and the data has been uploaded into Ecology's EIM database.

2. EPA made decisions about PCBs and protection of human health at OU-1 based on English Sole tissue concentrations on a Commencement Bay-wide basis. The conclusion is that site-wide English Sole tissue concentrations are not statistically different than background tissue concentrations measured at Carr Inlet. Ecology cannot support these conclusions because:

- a. The final report detailing the results, risk calculations, and how conclusions were made has not been made available or peer-reviewed.

EPA Response: The partial deletion is based on achieving the SQOs in sediment, not the fish tissue. However, Ecology has been provided all the data and calculations conducted on the fish tissue. WDFW is preparing a paper comparing Commencement Bay fish tissue to that of other data stations in Puget Sound. This paper should be released in early 2022. WDFW is also preparing a sampling report for the 2019 sampling effort they performed for EPA. EPA does not require data reports to be peer-reviewed to conduct actions and make decisions under CERCLA or the NCP as long as they are collected using an EPA approved QAPP that follows the Superfund data quality procedures.

- b. The report and risk calculations have not been reviewed by the tribes.

EPA Response: While the WDFW report has not been reviewed by the tribes, they have been provided the data and calculations produced by EPA.

- c. The decision as to whether human health-based standards have been met must be made on a site-wide basis.

EPA Response: EPA disagrees. There are seven operable units at this Site and each have their own RODs based on the evaluation of exposure pathways and COCs. Risks to humans at the former Asarco Tacoma Smelter Facility have little bearing on the risks to humans consuming fish in Commencement Bay. Further, fish in one waterway are not necessarily affected by sediment/water concentrations in another waterway (for example, fish in Thea Foss waterway are not affected by sediment concentrations in the Hylebos waterway). It is possible to achieve cleanup goals in one part of a site while another part does not.

- d. The tissue values are based only on English Sole rather than on fish consumed by the tribe and other community members.

EPA Response: English Sole was selected as the representative fish for this Site during the RI/FS process. To use any other fish in the assessment at this point would not be useful as we do not know their concentrations prior to the cleanup of the Site. However, the partial deletion is based on achieving the SQOs in sediment, not the fish tissue.

We hope that these responses helped alleviate these concerns and questions raised by Ecology and that Ecology is prepared to concur with this partial deletion. If you or your staff have any further questions regarding the CB/NT Site, please contact me at (206) 553-6705 or by email at koch.kristine@epa.gov. We look forward to hearing from you soon.

Regards,

Kristine Koch
Project Manager, Cleanup Section #3