

August 12, 2024

Oregon Department of Environmental Quality (DEQ)
Northwest Region Office
700 NE Multnomah Street, Suite 600
Portland, Oregon 97232

Attention: Kevin Dana, Cleanup Project Manager

Subject: Response to Comments on 2024 LSSAP
Crawford Street South Site
Portland, Oregon
ECSI No. 2363
File No. 6209-010-01

This letter responds to comments on the 2024 Leave Surface Sampling and Analysis Plan (2024 LSSAP) for the Crawford Street South site (ECSI # 2363) located in Portland, Oregon (the Site) and transmits the revised 2024 LSSAP. A draft 2024 LSSAP was submitted to the Oregon Department of Environmental Quality (DEQ) on June 13, 2024. The DEQ provided comments in a letter dated July 31, 2024; the DEQ included comments prepared by the U.S. Environmental Protection Agency (EPA) with its July 31, 2024 letter. The comments provided by each party are presented in italic font below, followed by our response in regular font.

RESPONSE TO DEQ COMMENTS

- 1. DEQ has an additional comment/concern regarding the May 2021 Quality Assurance Project Plan (QAPP) for the Upland Source Control Evaluation, attached as Appendix C to the LSSAP. A similar QAPP, dated August 2021, was attached to the recently submitted Addendum to Groundwater Source Control Evaluation Report for Crawford Street South. DEQ presumes that changes were made to the May 2021 QAPP to incorporate comments received from DEQ and EPA in the summer of 2021. If changes were indeed made, the August 2021 QAPP should be incorporated by reference into the 2024 LSSAP rather than the May 2021 QAPP.*

The August 16, 2021 QAPP has been included in the revised 2024 LSSAP, attached; we appreciate you noting that the more recent version was not included.



RESPONSE TO EPA COMMENTS

EPA comments were organized into “Primary,” “To Be Considered,” and “Matters of Style” and the response below follows this organization.

Primary

1. **Additional Sampling at XS13:** *PHSS Record of Decision (ROD; EPA, 2017) remedial action level (RAL) exceedances for PCBs and PAHs have been identified in riverbank soils on the adjacent Willamette Cove (WC) property, approximately 60 to 65 feet from transect XS13 (WC Group, 2024). There are no existing or proposed sample points between XS13-70R and XS13-TOE, but the Willamette Cove data suggests potential for contamination along XS13, particularly between offset ~100 and 130 feet (see LSSAP Figure 21g). EPA recommends adding sample locations in this area to help laterally bound the riverbank contamination and to inform the 60% Design and/or incorporating WC Group data.*

As detailed in the Additional Riverbank Sampling Report (GeoEngineers, 2022), and indicated in Section 2.5.3.3 of the 2024 LSSAP, several attempts at sample collection have occurred along transect XS-13 between the elevations of ordinary high water (OHW) to ordinary low water (OLW). However, bedrock and/or large blocks of concrete debris have been encountered precluding sample collection from this transect between location XS-13-70R, which is located at the top of the riverbank, and location XS-13-TOE, which is located at OLW. Additional detail on the previous sampling attempts along this transect has been added to Section 4.2 of the revised 2024 LSSAP to better explain why a sample at the LMID location is not proposed. Sampling at the XS-13-TOE location is proposed as shown on Figure 20 of the 2024 LSSAP.

2. **Scope of Leave Surface Sampling:** *Revise the LSSAP to clarify why, according to Section 1.0, “additional sampling above mean high water is not needed.” Based on Figures 21a-g, along several transects at different sample points, there is no data at or within ~3 feet vertically of the newly proposed leave surface. For example, at XS3-51, there is a RAL exceedance just above the leave surface, however there are no existing or proposed sample points at or below the leave surface. For most other transects there seems to be a lack of data at the leave surface, particularly in the upper bank. This appears to be a data gap and may be insufficient to support remedial design.*

The leave surface above OHW is not significantly changed in the design concept currently being evaluated relative to the leave surface of the approved Basis of Design Report (BODR). As identified in Section 5.3.2 of the approved BODR and detailed in the Additional Riverbank Sampling Report (GeoEngineers, 2022), the characterization of the leave surface above OHW is sufficient to complete the design of the Riverbank Source Control Measure (RBSCM). This was further discussed and detailed in our response to EPA comments on the BODR, presented in a November 17, 2022 letter to DEQ.

To Be Considered

1. **Consistency with 30% Drawings:** *The LSSAP cross-section figures and historical sampling data should be reviewed and revised as needed for consistency with the Preliminary (30%) Design Report Riverbank Source Control Measure (30% Design; GeoEngineers, 2023). There are several locations where data presented in the LSSAP figures do not match the 30% Design figures so a*



clarification should be provided as it appears color coding has been updated between deliverables. For example, XS3-OHW is depicted as having only PHSS ROD cleanup level (CUL) exceedances in LSSAP Figure 21b which matches data presented in Table 4, but the corresponding 30% Design Figure 5b shows a RAL exceedance in the lower interval at this location.

The figures will be updated and reviewed relative to the 30% Design figures once the 2024 LSSAP has been implemented and the resulting data reviewed and incorporated. These updated figures will be included in the 60% Design deliverable. Changes from the 30% Design figures will be identified.

- Proposed Capping Extent:** EPA recommends that the LSSAP text, figures and/or typical sections in Appendix A be revised to clarify the physical extent of capping being considered. The typical sections in Appendix A show that the cap may not cover the upper bank. However, there are several locations on the upper/mid bank and outside of this presumed capped area where additional leave surface sampling data may be necessary if these locations are indeed not being capped (e.g., XS3-51, refer to primary comment #2).

The extent and manner of capping will be detailed in the 60% Design deliverable.

- Depth of Contamination (DOC):** DOC should be determined for locations in the in-water region where a dredge-only remedy is being proposed. EPA considers DOC to have been established when there are at least two clean 1-foot intervals underlying a contaminated interval. EPA therefore recommends revising the LSSAP to analyze both samples in potential dredge-only areas, instead of archiving the lower interval as currently proposed.

Previous sampling along the beach has identified a hard pan sediment indicative of native material (not fill) at approximately 3 feet below grade from about mean high water (MHW) down to OLW. Therefore, we believe that collection of the 3- to 4-foot sample should be sufficient to characterize this native sediment at the proposed leave surface. However, to be consistent with EPA requirements within the Portland Harbor Superfund Site (PHSS), the 4- to 5-foot samples will be collected and analyzed without archiving. The report has been revised to reflect this additional work scope.

- Cathedral Park and Willamette Cove Data:** As sediment and riverbank sampling data from investigations at the Cathedral Park and Willamette Cove remedial design project areas become available, the Crawford Street South team should incorporate these data into the Crawford riverbank design.

We have been coordinating with the Willamette Cove In-Water Group and understand that they will be completing a riverbank leave surface investigation in fall 2024 or winter 2025. We will review the data and incorporate as appropriate into our design plans. Additionally, we are aware that porewater data for the Cathedral Park EPA Fund Lead project area will be available in the second quarter of 2025 and will be incorporated to the extent possible without delaying progress on our design deliverables. We are not aware of plans for additional riverbank sampling in the Cathedral Park project area but will continue to coordinate with the EPA for relevant data and transitioning of design at the project boundaries.



If you have any questions regarding this response to comments or the project in general, please do not hesitate to contact me at 503.577.1535 or aspencer@geoengineers.com.

Sincerely,
GeoEngineers, Inc.



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