



# Oregon

Tina Kotek, Governor

## Department of Environmental Quality

Northwest Region

700 NE Multnomah Street, Suite 600

Portland, OR 97232

(503) 229-5263

FAX (503) 229-6945

TTY 711

June 28, 2024

*via electronic mail*

MONTY JOHNSON  
JR SIMPLOT COMPANY  
14003 N RIVERGATE BLVD  
PORTAND OR 97203

Re: DEQ Review "Source Control Evaluation Report"  
JR Simplot Co.  
ECSI File No. 3343

Dear Mr. Johnson:

The Department of Environmental Quality (DEQ) has reviewed the report entitled, *Source Control Evaluation Report*, dated January 24, 2023. In general, DEQ is in agreement with the overall conclusions of the report and requests a performance monitoring plan be submitted to confirm the effectiveness of the proposed stormwater source control measures.

DEQ has the following comments:

1. **Section 2.5.3 Spills and Releases.** If available, please provide documentation on DEQ's NFA determination for the 1982 spill.
2. **Section 2.5.6 Stormwater Monitoring.** If available, please provide last 5 years of NPDES stormwater monitoring results.
3. **Section 3.1 Potential Contaminant Sources.** For completeness, the Source Control Evaluation (SCE) Report should include a discussion and evaluation of ammonia to address potential migration and geochemical effects (redox) to inorganics in sediment.
4. **Section 3.2 Potential Pathways to the River.** The SCE Report should better support the conclusions regarding the overland flow pathway is and incomplete pathway.
5. **Section 5.2 Groundwater Evaluation and Section 6 Source Control Evaluation.** Many unsupported and/or unnecessary allocation statements in the document should be removed, as they distract from the overall conclusion on whether additional source control or evaluation is needed for specific COIs and pathways.
6. **Section 5.2 Groundwater Evaluation.** Please provide the referenced figure which shows that the inferred groundwater direction on the Evraz property is flowing predominantly to the west-southwest, toward the Site, so the statement can be evaluated in the context of this report.
7. **Section 5.2 Groundwater Evaluation.** On page 12, it is stated: "The seepage meter installed directly offshore of the Site had an average specific discharge rate of only 0.07 centimeters per day (cm/day), which was among the lowest discharge rates within the entire RM2E project area. This seepage meter data confirms that groundwater from the Site discharges to the river in this area, but at noticeably lower rates than other areas of the river." Based on a review of Section 4.9 and Table 2-9 of the PDIER (Integral 2022),

these are overstatements. The specific discharge of 0.07 cm/day at seepage meter RM2EUO12 adjacent to the Simplot Terminal is within the range of all but one of the other twelve seepage meters installed and is of similar magnitude to the average specific discharge of all but two of the other meters. Indeed, the PDIER (Integral 2022, page 4-14) includes meter RM2EUO12 as one of eleven meters that are more or less the same: “Of the 13 stations, 11 had low average net-positive discharge values of <0.22 cm/day and a cycle of discharge and recharge that is correlated with the tide.”

8. **6.0 Source Control Evaluation.** In the final SCE Report, general statements, or direct citations of text from other reports, should be expanded to provide data supporting the relevancy of such information to the SCE weight-of-evidence for the Simplot Site and the goal of informing a future source control decision.
9. **6.2.1.1 Soil and Groundwater Evaluation (Arsenic).** The highest detected concentration of arsenic in the riverbank wells of 3.85 ug/L is below the EPA National Recommended Aquatic Life Criteria (NRWQC) (chronic) and DEQ’s ecological Risk Based Concentration (RBC) of 150 ug/L, the EPA Maximum Contaminant Level (MCL) of 10 ug/L, and is considered by DEQ to be toward the low end of naturally occurring levels reported in Portland Harbor shallow groundwater. Concentrations are above the Portland Harbor ROD Table 17 CUL of 0.018 ug/L. However, arsenic is naturally occurring in regional sediment and local geochemical conditions of the sediment-porewater environment predominantly drive porewater concentration as described in Appendix C of the Portland Harbor RI/FS Remedial Investigation Report. DEQ concurs with the overall conclusion that source control measures are not needed to address arsenic in Site groundwater.
10. **6.2.1.3 Sediment Evaluation (Arsenic).** This section (and subsequent Sediment Evaluation sections) needs to clarify what sediment data was evaluated and provide more specific information to support the conclusions. Without a more robust presentation, it is difficult to determine how strong of a line of evidence this conclusion is. A review of River Mile 2 East Draft Sufficiency Assessment Report<sup>1</sup> Figure B-9 Surface Sediment Arsenic Concentrations, supports the conclusion. However, the surface sediment for arsenic is limited to five samples adjacent to the Simplot Site. The figure reports concentrations in all five below 9 mg/Kg and one of the five samples below 3 mg/Kg.
11. **6.2.1.4 Summary (Arsenic).** DEQ concurs with the conclusions that even though arsenic concentrations in sediment exceed CULs, the report sediment results do not suggest that stormwater is a significant source of arsenic in the Site vicinity. However, given the sporadic high detections of arsenic concentrations observed at Outfalls 2 and 5, the proposed SCMs are prudent, and performance monitoring would strengthen the source control evaluation conclusions.
12. **6.2.6.1 Soil and Groundwater Evaluation (Manganese).** It should be noted that manganese is a naturally occurring element and is present in site soils. Manganese can be mobilized into the groundwater through geochemical or biological processes, which should be identified as a potential source at the Site.

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<sup>1</sup> 2020, Integral. River Mile 2 East Draft Sufficiency Assessment Report, Portland Harbor Superfund Site. Prepared by Integral Consulting Inc, for Evraz Inc. August 31, 2020.

13. **6.2.6.1 Soil and Groundwater Evaluation.** Additional information is needed to support the statement that Evraz is a source of elevated concentrations of manganese migrating on the Site.
14. **6.2.7.2 Soil and Groundwater Evaluation (Zinc).** A sediment evaluation for zinc was not included as a line of evidence for zinc. DEQ recommends including it to strengthen the SCE conclusions.
15. **6.2.8.2 Stormwater Solids and Stormwater Evaluation (SVOCs).** DEQ generally concurs with the evaluation and conclusion presented for BEHP, in that the likely cause of the anonymously high BEHP in stormwater at Outfall 5 is likely the result of the temporary berm material and is not likely a recontamination source to river sediments. However, given the very high detected value, DEQ requests additional monitoring of BEHP at OU5 to confirm this conclusion.
16. **5.4.2 Urban Background.** A stormwater background determination is not defined solely by similar concentrations at multiple locations. DEQ Rank Order Curves provide a more meaningful line of evidence on background concentrations in stormwater throughout the harbor.

A performance monitoring plan should be submitted to confirm the effectiveness of the proposed stormwater source control measures for arsenic, cadmium, manganese and total chlorides, and to confirm the previous BEHP detections at OU5 are not representative of stormwater in that basin. After results have been collected that confirm the effectiveness of the SCMs, please submit a revised SCE Report. EPA reviewed the Report and provided comments to DEQ. DEQ has provided EPA's comments in Attachment 1 for your consideration.

If you have any questions, please call me at (503) 860-9661 or via email at [Robert.hood@deq.stat.or.us](mailto:Robert.hood@deq.stat.or.us).

Respectfully,

A handwritten signature in blue ink, appearing to read "Rob A Hood Jr", with a stylized flourish at the end.

Robert A. Hood, Jr.  
Project Manager  
NW Region Cleanup and Tanks

cc: Administrative File  
DEQ: Mike Romero, Dave Lacey  
MFA: Jessica Glenn, Dana Domenighini  
EPA: Laura Hanna  
Five Tribes: Peter Shanahan, Jennifer Hart, Gail Fricano

Attachment: EPA Review Comments.

## **Attachment: EPA Review Comments**

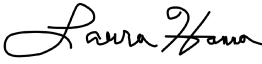


**REGION 10**  
SEATTLE, WA 98101

June 24, 2024

**MEMORANDUM**

**SUBJECT:** Comments on the Source Control Evaluation  
J.R. Simplot Company Rivergate Terminal, Portland, Oregon  
ECSI # 3343  
January 2023

**FROM:** Laura Hanna, RG, Remedial Project Manager   
Superfund and Emergency Management Division, EPA

**TO:** Rob Hood, Project Manager  
NWR Cleanup, Oregon Department of Environmental Quality

The following are the U.S. Environmental Protection Agency's (EPA) comments on the January 24, 2023, document titled *Source Control Evaluation Report, J.R. Simplot Rivergate Terminal*. The document was prepared by Maul Foster & Alongi, Inc., on behalf of J.R. Simplot Company, the site owner. The Simplot site is located at 14003 N Rivergate Boulevard, Portland, Oregon. The Portland Harbor Superfund Site (PHSS) Record of Decision (ROD) identified a contaminated riverbank at the site between river mile 2.5 and 2.8 (EPA 2017). The site is listed in the Oregon Department of Environmental Quality (DEQ) Environmental Cleanup Site Information (ECSI) database as ECSI #3343. The riverbank characterization is being conducted through EPA's CERCLA authority as part of the remedial action design for of the adjacent in-water project area (RM2E).

EPA understands the overall goal of the source control evaluation (SCE) is to identify and evaluate potential controls for contaminants in soil, groundwater, or stormwater at the site that have the potential for migrating to the Willamette River at concentrations that may pose unacceptable risks. EPA's review focuses on protection of the Willamette River related to the potential for migration of contaminants from the site that may impact achievement of remedial action objectives and applicable or relevant and appropriate requirements for surface water and/or sediment.

EPA comments are presented in the following sections. Comments are separated in three groups: (1) "Primary," which identify concerns that must be resolved to achieve the assessment's objective, (2) "To Be Considered," which, if addressed or resolved, would reduce uncertainty, improve confidence in the document's conclusions, and/or best support the assessment's objectives, and (3) "Matters of

Style,” which substantially or adversely affect the presentation of the technical information provided in the report.

### Primary Comments

1. **Section 3.1 Potential Contaminant Sources:** For completeness, the SCE should include a discussion and evaluation of ammonia to address potential migration and geochemical effects (redox) to inorganics in sediment. The absence of sampling for ammonia in soil, groundwater, stormwater catch basin solids, and stormwater presents a data gap, and future sampling should include this contaminant to understand its presence/absence and, if present, the concentrations, and the spatial distribution.
2. The SCE should be revised throughout (specifically Section 6) to support the study purpose and objectives, as identified in SCE Sections 1.1 and 5, that the SCE intends to provide a “weight-of-evidence” evaluation whether potential contaminants require source control measures. The revisions should include providing empirical evaluations and data that add weight to various lines of evidence. For example, the SCE should provide specific and clear connections between the information regarding adjacent site contamination (Evraz) and the Simplot site to support the SCE weight-of-evidence approach. In addition, general statements, or direct citations of text from other reports should be expanded to provide data supporting the relevancy of such information to the SCE weight-of-evidence for the Simplot site and the goal of informing a future decision for source control measures.
3. **Section 3.2 Potential Pathways to the River:** The SCE should better support the conclusions regarding the overland flow pathway by providing facts, data, and technical rationale that substantiates the stated observations that overland flow is an incomplete pathway.
4. The SCE should provide an evaluation of the PHSS ROD CULs (EPA 2017 and EPA 2020)<sup>1</sup>, separately from the screening process used for the SLVs. Concentration thresholds presented in this report include established ROD CULs undifferentiated as “screening level values (SLVs).” The general catch-all term and the selective evaluation process described in Section 5.1 as a definitive line of evidence, erroneously consider CULs as screening levels. The SCE should evaluate the attainment of ROD established CULs that are necessary for long-term protectiveness and to document progress towards achieving the PHSS ROD remedial action objectives (RAOs). An appropriate method to reduce chemicals from a regular sampling program at a site is to identify their absence in the historical record of site sources, releases, and contaminant discharges, coupled with multiple samples that have non-detect analytical results with reporting limits less than the established ROD CULs.
5. **Section 5.2 Groundwater Evaluation:** Additional evaluation should be performed and documented in the SCE to support conclusions about attenuation processes occurring at the site. The necessary evaluations include technical details to explain the variations in concentrations between the one

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<sup>1</sup> ROD Table 17 was modified in an errata memorandum that can be found on EPA’s website: <https://semspub.epa.gov/work/10/100200076.pdf>. The Errata #2 Table 17 supersedes the ROD Table 17.

upgradient well (MW-5) compared to the shoreline wells (MW-1 through MW-4) and the potential for useful information to be added from PZ-1 and PZ-2, which were not sampled. SCE conclusions are based only on a high/low concentration comparison between two wells; however, other factors beyond attenuation processes are not explored, nor ruled out, in this evaluation. Factors to consider include but are not limited to, time of sampling during possible gradient reversals and influence of surface water in the shoreline wells under various river stage conditions.

6. **Section 5.3 Stormwater Evaluation:** The SCE stormwater evaluation should include a greater number of measurements to provide a statistically sufficient dataset and perform more analysis to identify statistically significant trends to support SCE conclusions.
7. **Section 6.1, Analytes with Concentrations below SLVs:** The SCE should provide the rationale with supporting data before concluding that an analyte concentration measured in an on-site upgradient well is representative of background conditions. For the Portland Harbor Superfund Site, EPA has not agreed upon universally acceptable or applicable background concentrations in groundwater. Additionally, the description of cyanide and potential offsite sources needs to be supported by a technical evaluation.
8. The SCE should conduct the evaluation of analytical results following an acceptable interpretation of the rules provided in Sections 6 and 7 of the PHSS Data Management Plan (EPA 2021). This requires the SCE Section 4 tables provide a separate evaluation of the non-detected compounds with detection limits that exceed the ROD CULs. Such non-detect results should be evaluated as exceedances of criteria and potentially considered a data gap for source control, as needed. Analytical results of several samples have non-detect values (U-qualified) that are significantly greater than the ROD CUL. Until an appropriate evaluation of the analytical results is completed, the data should not be used to substantiate the SCE conclusions that source control has been achieved. In addition, the incorrect summation method, described in footnotes to Table 4.1, must be corrected for all calculated totals and interpretation of results revised throughout the SCE based on these revised calculated totals. Notable is the summations for PCB.
9. **Section 6.1 and Table 4-3 Detection Limits:** EPA expects that all efforts will be made and reported in the SCE relative to obtaining the lowest reasonably achievable detection limits to meet the CUL criteria. If the sampling techniques and analytical methods cannot achieve reporting limits compatible with the CUL criteria, the report should describe whether the data can be used to meet the study objectives and what effects the reporting limits have on achieving the objectives. For example, water samples should be analyzed for PCB congeners by EPA Method 1668C (PCBs as congeners), which is able to achieve lower RLs/MDLs (i.e., more sensitive) and is a more accurate and precise method compared to SW 8082A. The summation of congeners for total PCB would better meet the objectives and provide for a more meaningful comparison to the CULs.
10. **Section 6.2:** The SCE should provide further information, including but not limited to, well construction diagrams, cross section diagrams, and groundwater elevation data/maps to characterize the hydrogeologic flow regime at the site and the related effects on transport of

chemicals to the Willamette River. The SCE has uncertainty and data gaps related to the tidal and river stage influences on groundwater elevations. The SCE presents limited information related to groundwater elevations, which are measured across a relatively large vertical interval of 6 feet to 25 feet below ground surface. An evaluation of the potential influence from the river stage, which has been documented in shoreline wells throughout Portland Harbor, should be performed. The objective of an evaluation is to verify whether the fate and transport of contaminate concentrations migrating towards the river are influenced by gradient reversals and river recharge to the wells.

11. The stormwater evaluation (Section 6) should include the data and other information regarding Outfall 4 that is described in Section 5.4.2. In addition, the SCE needs to provide further analyte-specific data in Sections 6.1 and 6.2 that are missing or insufficient and are necessary to support conclusions that concentrations of certain chemicals in stormwater for analytes detected above ROD CULs or JSCS criteria can be attributed to atmospheric deposits or other sources.
12. **Section 6.2.8.2 Stormwater Solids and Stormwater Evaluation:** Supplemental stormwater sampling should be conducted to resolve the data gaps resulting from non-representative samples. This section notes that materials used in temporary berm construction at Outfall 5 are potentially contributing to exceedances of the BEHP SLV. Correlating SLV exceedances with sampling methods is not an appropriate method to support a source control evaluation.
13. **Section 6.2.10.1 Pesticides, Soil and Groundwater Evaluation:** The SCE should provide an evaluation of analytical results of pesticides in groundwater. Notable missing data are for pesticides. The additional information should describe and evaluate the data including the concentration for results qualified as non-detect.
14. Further stormwater sampling is recommended to verify performance of the proposed SCMs, which are listed in Section 6.2 and subsections. The performance monitoring objectives are to evaluate whether the additional SCMs are effective in reducing chemical concentrations below the CULs, SLVs, and Rank Order Curve inflection points.

#### **To Be Considered**

1. The use of information and data from the 2022 Draft PDI Evaluation Report for RM2E (Integral 2022) to support this SCE should be noted as draft, and any figures, data, information to support conclusions and weight of evidence should be made with caution as they are subject to change. The 2022 Draft PDI Evaluation Report is a draft document, which is incorrectly cited in the References section by not noting its draft status. The Draft PDI report is under review by EPA and its partners and is subject to change. Specific to the Simplot SCE, the seepage meter information and offshore groundwater discharge are subject to revisions. Pending regulatory reviews, the report is anticipated to be final in mid-2023 and updates should be incorporated into the revised SCE.
2. **Section 2.4 Regulatory History:** This subsection references the National Pollutant Discharge Elimination System (NPDES) permit in place at the site. Consider summarizing the pertinent



requirements of this permit in the SCE. Add a citation for the NPDES permit in the text where it is referenced and in the References section.

3. **Section 2.5.6 Stormwater Monitoring:** The wording implies that NPDES permit waivers suggest BMPs implemented at the site are effective with respect to the ROD RAOs. This language is inaccurate because the NPDES permit requirements are not equivalent to RAOs and the wording should therefore be struck from the document.
4. **Section 2.6 ongoing SCMs and BMPs:** Provide citations for the site's stormwater pollution control plan and spill prevention, control, and countermeasure plan referenced in the text and add full citations in the References section.
5. **Section 5.4.2 Urban Background:** A stormwater background determination should have a separate evaluation and weight of evidence and is not defined solely by similar concentrations at multiple locations. Background conditions are determined by the DEQ Rank Order Curves. Any exceedances of criteria (CULs) that plot above the Rank Order Curve inflection points should be considered potential threats to the PHSS RAOs, which may require implementation of SCMs.
6. **Section 6.1, Analytes with Concentrations below SLVs,** first paragraph on page 16: The various adjectives used to characterize the ROD CULs or JSCS SLVs should be removed. The concern for "very conservative" criteria could be addressed by using updated SLVs that have changed after those published in the 2005 JSCS and the 2007 update to the JSCS Table 3-1.
7. **Section 6.1, Analytes with Concentrations below SLVs,** first bullet after first paragraph on page 16: An expanded summary explaining what was found regarding diesel-range total petroleum hydrocarbons should be provided, similar to the summaries provided for the subsequent bulleted analytes.
8. **Section 6.2 and subsections pertaining to analyte-specific sediment evaluation:** All the "Sediment Evaluation" subsections need to be reviewed and revised to report the correct concentrations, to reference the sample identifier for specific concentrations mentioned in the text, and to reference the source in which the result was reported. Revise the text accordingly, including the interpretations of the results that are discussed. For example, in Section 6.2.9.3, a total PCB concentration of 1,600,000 µg/kg is stated in the text although this concentration cannot be identified in reports prepared by AECOM and Geosyntec (2019) or Integral (2022) and is orders of magnitude above the highest total PCB concentration reported in the ROD (EPA 2017 and EPA 2020). Additionally, in Section 6.2.10.3, a total DDx concentration of 71,500 µg/kg is stated in the text and does not match any results in AECOM and Geosyntec (2019), Integral (2022), or in the ROD (EPA 2017 and EPA 2020) for the River Mile 2 East Project Area.
9. **Section 7 Summary and Conclusion:** The SCE conclusions must be supported by technical information that conforms to the intent of JSCS Section 5.5, which specifically calls out "*...achieve the long-term remedial action objectives for the Portland Harbor Superfund Site.*" The SCE reports exceedances of CUL criteria, which is contrary to the PHSS selected remedy that relies in part on

source control to achieve the CULs in a reasonable time (ROD Section 9). Additionally, the last paragraph of SCE Section 7 describes additional SCMs and should include a recommendation for long term performance monitoring to verify the effectiveness of the SCMs after implementation.

### **Matters of Style**

1. Include the site ECSI number on the SCE cover and title page and describe the basis for site listing in the introduction section.
2. Section 1.2 Regulatory Framework for the Source Control Evaluation: this section should introduce ECSI listing, the regulatory background, and cleanup agreement with DEQ, as described in the first bullet of Section 2.4.

### **References**

- AECOM and Geosyntec. 2019. *PDI Evaluation Report, Portland Harbor Pre-Remedial Design Investigation and Baseline Sampling, Portland Harbor Superfund Site, Portland, Oregon*. Portland, Oregon: AECOM and Geosyntec Consultants. Report prepared for Portland Harbor Pre-RD AOC Group.
- EPA. 2021. *Program Data Management Plan, Portland Harbor Remedial Design Investigation – Portland Harbor Superfund Site*. Prepared by EPA Region 10. Available at: <http://ph-public-data.com/document/DMP2021/>
- EPA. 2020. *Memorandum re: Errata #2 for Portland Harbor Superfund Site Record of Decision ROD Table 17*. To Portland Harbor file. Office of Environmental Cleanup, USEPA Region 10, Seattle, Washington. January.
- EPA. 2017. *Portland Harbor Superfund Site Record of Decision, Portland, Oregon*. Prepared by EPA Region 10.
- Integral. 2022. *Draft Pre-Design Investigation Evaluation Report, River Mile 2 East Project Area, Portland Harbor Superfund Site*.
- MFA. 2019. *Sediment Characterization Report, J.R. Simplot Rivergate Terminal*. Portland, Oregon: Maul Foster & Alongi, Inc. Prepared for J.R. Simplot Company.

cc: David Lacey, DEQ  
Rich Francis, EPA  
Katie Young, CDM Smith