



Oregon

Kate Brown, Governor

Department of Environmental Quality

Northwest Region

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July 24, 2021

sent via email

Evelyn Ives, PE
Christine Kimmel, LHG
Landau Associates, Inc.
155 NE 100th St, Ste 302 • Seattle, WA 98125

RE: 1, 4-Dioxane Reconnaissance-Level Investigation Work Plan, East Multnomah County Cleanup Project, Portland, Oregon. ECSI #1479

Dear Ms. Ives and Ms. Kimmel,

Thank you for your *1,4-Dioxane Reconnaissance-Level Investigation Work Plan, East Multnomah County Cleanup Project, Portland, Oregon*, dated July 13, 2021 and prepared by Landau Associates, Inc. Oregon Department of Environmental Quality (DEQ) approves this document with comments included below for clarification or to be addressed in the summary technical memorandum.

This document provides a plan to obtain requested groundwater samples from monitoring wells where 1,4-dioxane will possibly occur representing both the upper TSA and lower TSA aquifers. The solvent 1,4-dioxane is associated with 1,1,1-TCA through its use as a solvent stabilizer. The six well locations chosen for this work included wells with currently or historically-elevated concentrations of TCE, detections of 1,1,1-TCA, and up-gradient and down-gradient locations relative to source areas. It should be noted that up-gradient and down-gradient well selections in this work plan may be influenced by the locations of groundwater remediation extraction wells and may not be intuitive. However, it not clear how the chosen project wells represent upgradient, source area and downgradient areas for each aquifer. DEQ understands that on this mature remediation project, the current areas of maximum TCE concentrations in groundwater may no longer correlate with the original contaminant source areas. Please provide clarification in the summary technical memorandum.

The 1, 4-dioxane data resulting from this work are proposed for screening against DEQ's Urban Residential risk-based concentrations (RBCs) for groundwater ingestion and inhalation from tap water for the urban residential scenario (2.0 µg/L). The Residential RBC for groundwater ingestion and inhalation from tap water is 0.46 µg/L, which may be a more appropriate screening value for this work in the Portland groundwater protection area.

Following groundwater sampling and validation and acceptance of lab results, DEQ looks forward to reviewing the technical memorandum summarizing project sampling activities and analysis of lab results. After review of these results, a determination will be made as to whether additional sampling of specific wells or other steps are necessary.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read 'K. Thiessen', with a stylized, sweeping underline.

Kenneth Thiessen, CEG
Northwest Region Cleanup Section

cc:

Deborah Taege, The Boeing Company
Cindy Bartlett, RG, Geosyntec Consultants
Brent Miller, PE, Geosyntec Consultants
Jason Hegdahl, Cascade Corporation
Brian Fischer, Cascade Corporation
Dan Hafley, RG, DEQ NWR
ECSI #1479