



Oregon

Kate Brown, Governor

Department of Environmental Quality

Northwest Region

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September 11, 2020

Sent via email

Jason Hegdahl
Cascade Corporation
2201 NE 201st Avenue
Fairview, Oregon 97024

Deborah Taege
The Boeing Company
P.O. Box 2207, MIS 7A-XA
Seattle, WA 98124

RE: Annual Performance Report 1 January 2019 – 31 December 2019. East Multnomah County Troutdale Sandstone Aquifer Remedy. ECSI #1479

Dear Mr. Hegdahl and Ms. Taege,

The Oregon Department of Environmental Quality (DEQ) has reviewed the *Annual Performance Report for 2019. East Multnomah County Troutdale Sandstone Aquifer Remedy*, dated May 31, 2019. This report was prepared on your behalf by Geosyntec Consultants, Inc., Landau Associates, Inc. and SS Papadopoulos and Associates, Inc.

DEQ concurs with the following changes to support future project zone closures by optimizing monitoring programs and remedy performance. See attached Figure 1-2 for locations of site features referenced in this letter.

Approved Changes to the Central Treatment System

The Central Treatment System (CTS) continues to operate and maintain hydraulic control of groundwater containing dissolved volatile organic compounds (VOCs). Continue operation of extraction wells EW-2 and EW-14 and temporary shutdown of EW-23. Continue groundwater monitoring to evaluate if resumed pumping at EW-23 is needed.

Continue temporary shutdown of EW-1 to allow for increased flushing in the Troutdale Sandstone Aquifer (TSA) mound area at EW-2 and EW-14.

The soil vapor extraction (SVE) system has been effective at removing VOC mass from unsaturated subsurface soils. No changes are prescribed for the operation of the SVE system at this time. SVE will continue at 6 wells (WV-75-95.5, VMW-C, VMW-E, VMW-F, VMW-G, and VMW-H).

DEQ agrees with the following changes to the groundwater monitoring program and schedule modifications:

- Decommission Upper TSA wells BOP-21(ds) and BOP-42(ds) along with Lower TSA wells BOP-42(dg) and BOP-60(dg). These four wells are located in Remedy Zone B and are redundant to several other wells located between these locations and the leading edge of the dissolved VOC plume. These four wells meet the project criteria for decommissioning.
- Discontinue East Multnomah County project water quality monitoring at two wells owned by the Portland Water Bureau: PWB-1(uts) and PWB-1(lts). This change was requested previously in 2017, but was not approved by DEQ, given that low detections of trichloroethene (TCE) were found in PWB-1(lts). Since then, TCE at the PWB wells has been monitored by the East Multnomah County project and the PWB. Recent TCE concentrations at PWB-1(lts) have been (between 1.0 and 2.0 µg/L). Other monitoring wells located between the PWB wells and the dissolved VOC plume are below the Maximum Contaminant Level (MCL) for TCE of 5.0 µg/L.
- Annual monitoring and sampling of wells PWB-1(uts) and PWB-1(lts) will be continued by the PWB.
- If TCE concentrations in PWB-1(uts) and PWB-1(lts) approach or exceed the MCL for TCE of 5.0 µg/L, a different plan will be developed at that time.
- The well decommissioning and CTS operational changes approved here are for wells between approximately 2660 and 3780 feet from PWB-1(uts) and PWB-1(lts) and are not expected to have an adverse affect on groundwater quality at PWB-1(uts) and PWB-1(lts).

Please feel free to call me with questions.

Sincerely,



Kenneth Thiessen RG/CEG
Northwest Region Cleanup Section

cc: Cindy Bartlett, R.G. Geosyntec Consultants
Chris Kimmel, P.G. Landau Associates
S.S. Papadopoulos
Doug Wise, Portland Water Bureau
ECSI #1479

Attached: Figure 1-2. TSA Monitoring Well Locations and Remediation System Layout



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