



Oregon

Tina Kotek, Governor

Department of Environmental Quality

Northwest Region

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March 14, 2024

Bob Wyatt
NW Natural
220 NW 2nd Avenue
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via electronic delivery (email)

Re: DEQ Comments on the LNG Basin and Former Koppers Basin Groundwater Evaluation/Fill WBZ Interceptor Trench Performance – First and Second Quarter 2023 Former Gasco Manufactured Gas Plant Operable Unit (Gasco OU) Portland, Oregon ECSI# 84

Dear Bob Wyatt:

The Oregon Department of Environmental Quality (DEQ) reviewed the *LNG Basin and Former Koppers Basin Groundwater Evaluation/Fill WBZ Interceptor Trench Performance – First and Second Quarter 2023*¹ (Report) submitted by Anchor QEA, LLC on behalf of NW Natural. The Report was prepared under upland cleanup agreements^{2,3,4} and describes the monitoring activities associated with the removal action that was implemented to control groundwater in the fill downgradient of the Liquefied Natural Gas (LNG) Basin retrofit and post-lease termination conditions at the Former Koppers Basin. The Report provides monitoring data and sampling results collected during the first and second quarter of 2023 to evaluate the performance and effectiveness of the interceptor trench system.

DEQ does not require a revision to the Report; however, we request that NW Natural briefly provide additional or clarifying information in a comment response format attached to the next *LNG Basin and Former Koppers Basin Groundwater Evaluation/Fill WBZ Interceptor Trench Performance Report*. Our comments on the Report are provided below.

General Comments

- 1) During a meeting on February 15, 2024, NW Natural's technical team agreed to add sampling of MW-21U to the scope of the groundwater monitoring program. The purpose of groundwater sampling at MW-21U is to monitor the potential migration of contamination from the Fill water-bearing zone (WBZ) to the Upper Alluvium WBZ along the shoreline where the upper silt unit may be absent or discontinuous. Future Reports should present and discuss sample results at MW-21U.

¹ Anchor QEA, LLC. 2024. LNG Basin and Former Koppers Basin Groundwater Evaluation/Fill WBZ Interceptor Trench Performance – First and Second Quarter 2023, Former Gasco Manufactured Gas Plant Operable Unit. Prepared on behalf of NW Natural. February 5.

² DEQ. 1994. Voluntary Agreement for Remedial Investigation/Feasibility Study. DEQ No. WMCVC-NWR-94-13. August 8.

³ DEQ. 2006. First Addendum to Voluntary Agreement for Remedial Investigation/Feasibility Study. DEQ No. WMCVC-NWR-94-13. July 19.

⁴ DEQ. 2016. Second Addendum to Voluntary Agreement for Remedial Investigation/Feasibility Study. DEQ No. WMCVC-NWR-94-13. October 11.

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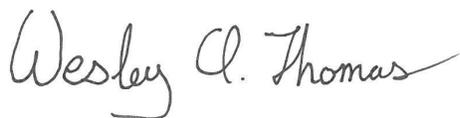
- 2) Concentrations of polycyclic aromatic hydrocarbons at MW-02-32, MW-03-26, and OW-07-17 increased compared to recent previous monitoring events. DEQ requests that NW Natural identify noticeable changes in contaminant concentrations in individual wells and discuss potential causes where increasing concentration trends appear over multiple monitoring periods in future Reports. Some wells may be outside of the trench capture zones.

Specific Comments

- 1) **Section 3.1, T-50 DNAPL Observations and Recovery.** DEQ has the following comments:
 - a) Briefly describe the methods used to estimate dense non-aqueous phase liquid (DNAPL) recovery volumes from the T-50 trench.
 - b) Consistent with NW Natural's response⁵ to DEQ General Comment 3b⁶ on the *LNG Basin and Former Koppers Basin Groundwater Evaluation/Fill WBZ Interceptor Trench Performance – Second through Fourth Quarter 2022*⁷, please provide a table summarizing DNAPL removal quantities from the T-50 trench, including a cumulative total.
 - c) Identify Fill WBZ monitoring wells within or near the trench capture zone where DNAPL entry has been observed after trench startup (e.g., MW-50F), when DNAPL was first observed, and measured DNAPL thicknesses over time.
- 2) **Section 5.3, Contaminant Mass Removed.** The last sentence of this section states that 5 pounds of total cyanide were removed during the first and second quarter 2023. However, Table 3 lists 1 pound of total cyanide removed. Please clarify the mass of total cyanide removed.

Please do not hesitate to contact me at (971) 263-8822 or Wesley.Thomas@deq.oregon.gov if you have any questions regarding this letter.

Sincerely,



Wesley A. Thomas
Project Manager
NWR Cleanup Section

EC: Heidi Nelson, DEQ
Sarah Van Glubt, DEQ
Amber Lutey, DEQ
Patty Dost, Pearl Legal Group

⁵ Anchor QEA, LLC. 2023. Email to Wesley Thomas (DEQ), Subject: RE: NW Natural: LNG Basin and Former Koppers Basin Groundwater Elevation/Fill WBZ Interceptor Trench Performance – Second through Fourth Quarter 2022 Memorandum. November 7.

⁶ DEQ. 2023. Letter to Bob Wyatt (NW Natural), Re: DEQ Comments on the LNG Basin and Former Koppers Basin Groundwater Evaluation/Fill WBZ Interceptor Trench Performance – Second Through Fourth Quarter 2022, Former Gasco Manufactured Gas Plant Operable Unit (Gasco OU), Portland, Oregon, ECSI# 84. July 27.

⁷ Anchor QEA, LLC. 2023. LNG Basin and Former Koppers Basin Groundwater Evaluation/Fill WBZ Interceptor Trench Performance – Second through Fourth Quarter 2022, Former Gasco Manufactured Gas Plant Operable Unit. Prepared on behalf of NW Natural. June 21.

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