

HAHN AND ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

December 15, 2023

Mr. Wes Thomas
Oregon Department of Environmental Quality
Northwest Region, Portland Office
Portland Harbor Section
700 NE Multnomah Street, #600
Portland, Oregon 97232

HAI Project No. 2708
DEQ ECSI File No. 84

**SUBJECT: Progress Report, NW Natural Site, 7900 NW St. Helens Avenue and
7200 NW Front Avenue, Portland, Oregon**

Dear Mr. Thomas,

Hahn and Associates, Inc. (HAI) has prepared this monthly Progress Report to summarize Remedial Investigation/Feasibility Study (RI/FS) and source control-related work conducted by NW Natural relating to historic manufactured gas plant (MGP) activities at the NW Natural Site during the month of November 2023. NW Natural is completing upland investigation and cleanup activities at the NW Natural Site under the Voluntary Agreement No. ECVC-WMCVC-NWR-94-13 (Voluntary Agreement) between NW Natural and the Oregon Department of Environmental Quality (DEQ).

**1. ACTIONS TAKEN UNDER THE VOLUNTARY AGREEMENT DURING
THE PREVIOUS MONTH**

Tasks related to maintenance of the HC&C system and the groundwater treatment system were conducted during November 2023, with the system operating in full long-term operational mode.

A total of 8,657,183 gallons of water were treated in the on-site groundwater treatment plant and discharged during November 2023 with all monitoring and reporting completed in accordance with the facility's NPDES permit.

Field activities related to monitoring and maintenance of the dense non-aqueous phase liquid (DNAPL) extraction system at Fill water bearing zone (WBZ) well locations MW-6-32 and MW-13-30 occurred during November 2023. The system recovered approximately 7 gallons of fluids in November. Recovered fluids (accumulating since tank emptying on October 4, 2023) are estimated to be approximately 75% DNAPL with 22 gallons of total fluids in tank storage.

DNAPL entry into Fill WBZ Trench T-50 was first observed during August 2022 with subsequent plumbing of a DNAPL pump within the sump at this location. To date approximately 382 gallons of DNAPL have been recovered from the T-50 sump, approximately 28 gallons of which were recovered during November 2023.

Baseline DNAPL removal as needed to maintain levels below the top of the well sumps was conducted by Anchor QEA during November 2023 in the following wells near the river shoreline.

- MW-16-45
- MW-18-30

- MW-26U
- MW-38U
- PW-2L
- PW-14U

Water removal from the Koppers Basin continued during November 2023 as needed to keep the basin free of standing water. A total of 256,863 gallons of water were removed from the basin during November 2023 with treatment through the Groundwater Treatment System. Visual observations during November confirmed that the basin remained free of standing water during this timeframe.

The following upland FS related field tasks were in progress during November 2023:

- Monthly measurements of DNAPL presence at Fill WBZ wells MW-10-25, MW-43F, MW-44F, and MW-45F were conducted during November 2023. No measurable DNAPL was present in wells MW-43F or MW-44F; 1.51 feet of DNAPL was measured within well MW-45F; and 1.01 feet of DNAPL was measured within well MW-10-25 during November. The DNAPL from well MW-45F (0.25 gallons) was last removed on July 18, 2023. The DNAPL from MW-10-25 (0.7 gallons) was last removed on November 18, 2022.

2. ACTIONS SCHEDULED TO BE TAKEN IN THE NEXT MONTH

NW Natural and DEQ technical working group communications and meetings will occur as needed within the next month to discuss ongoing project tasks.

Routine baseline DNAPL measurements and removal will continue as needed to maintain levels below the top of the well sumps in nearshore HC&C-related wells. Baseline measurement and removal of DNAPL from additional select upland area wells will also continue.

Tasks related to routine maintenance of the HC&C system and the groundwater treatment system will be conducted.

The Koppers tank basin will continue to be visually monitored to ensure that it remains free of standing water.

The collection of soil embankment samples and surface sediment samples from Doane Creek as described in the January 25, 2023 *Feasibility Study Comprehensive Data Gaps Work Plan*, conditionally approved by DEQ in correspondence dated February 13, 2023, will be completed pending execution of an access agreement with BNSF.

Monitoring since September 2017 indicates that DNAPL proximate to wells MW-43F and MW-44F has not been sufficiently mobile to accumulate the minimum thickness required for sampling (0.5 feet). A DNAPL sample will be collected for laboratory DNAPL mobility assessment testing from wells MW-43F and MW-44F if measurable thicknesses / sufficient volumes of DNAPL are identified at these locations in the future.

Routine quarterly monitoring activities for select Fill WBZ wells will occur during December 2023.

3. LABORATORY TEST RESULTS RECEIVED DURING THE PREVIOUS MONTH

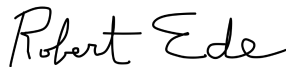
NW Natural receives test results on a regular basis as a result of routine monitoring related to groundwater quality or as specified by various permit requirements. Additionally, test results are periodically received through implementation of task-specific investigation activities resulting from agency-approved work plans. These data are provided to DEQ or the permitting authority (if different than DEQ) in accordance with previously approved formats and schedules.

4. PROBLEMS EXPERIENCED DURING THE PREVIOUS MONTH

There were no problems of significance experienced during the previous month.

Should you have any questions, please contact the undersigned.

Sincerely,



Rob Ede, R.G.
Principal

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cc: Bob Wyatt, NW Natural
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