HAHN AND ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS

July 17, 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 activities conducted by NW Natural relating to historic manufactured gas plant (MGP) activities at the NW Natural Site during the month of June 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 June 2023, with the system operating in full long-term operational mode.

A total of 9,291,649 gallons of water were treated in the on-site groundwater treatment plant and discharged during June 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 June 2023. The system recovered approximately 39 gallons of fluids in June. Recovered fluids (accumulating since tank emptying on April 28, 2022) are estimated to be between 50% and 60% DNAPL with 444 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 261 gallons of DNAPL have been recovered from the T-50 sump, approximately 45 gallons of which were recovered during June 2023.

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

- MW-16-45
- MW-26U

Mr. Wes Thomas

July 17, 2023

Page 2 of 4

- MW-27U
- MW-38U
- MW-PW2L
- PW-2L
- PW-6U
- PW-11Ub
- PW-13U

Water removal from the Koppers Basin continued during June 2023 as needed to keep the basin free of standing water. A total of 110,409 gallons of water were removed from the basin during June 2023 with treatment through the Groundwater Treatment System. Visual observations during June confirmed that the basin remained free of standing water during this timeframe.

New extraction wells PW-10Ub and PW-10Lc were integrated into the HC&C system during June 2023.

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

Monthly measurements of DNAPL presence at Fill WBZ wells MW-10-25, MW-43F, MW-44F, and MW-45F were conducted during June 2023. No measurable DNAPL was present in wells MW-43F or MW-44F; 1.29 feet of DNAPL was present within well MW-45F; and 0.98 feet of DNAPL was present within well MW-10-25 during June. The DNAPL from wells MW-45F (0.6 gallons) was last removed on June 12, 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 approval of access applications that have been submitted to BNSF and Portland and Western Railroads.

Monitoring since September 2017 indicates that DNAPL proximate to wells MW-43F and MW-44F has not been sufficiently mobile to accumulate the minimum

Mr. Wes Thomas

July 17, 2023

Page 3 of 4

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.

A sample of water discharging from City of Portland Outfall 22C may be collected at the discretion of the project team from the City of Portland Outfall 22C during July if storm event sampling criteria, as specified in the DEQ-approved *Doane Creek Source Control Evaluation Workplan* (updated sampling criteria as approved March 20, 2023) are satisfied.

Extraction wells PW-10Lb and PW-10U, previously estimated for decommissioning during July 2023, are now anticipated to be decommissioned during October 2023 based on driller availability. The delay in decommissioning of these no longer used wells is reported here as a schedule update.

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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Robert Ede

cc: Bob Wyatt, NW Natural
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Mr. Wes Thomas

July 17, 2023

Page 4 of 4

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