

**HAHN AND ASSOCIATES, INC.**  
ENVIRONMENTAL CONSULTANTS

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

A total of 10,053,367 gallons of water were treated in the on-site groundwater treatment plant and discharged during April 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 April 2023. The system recovered approximately 24 gallons of fluids in April. Recovered fluids (accumulating since tank emptying on April 28, 2022) are estimated to be between 50% and 60% DNAPL with 359 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 178 gallons of DNAPL have been recovered from the T-50 sump, approximately 29 gallons of which were recovered during April 2023.

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

- DW-14U
- MW-18-30

- MW-26U
- MW-27U
- MW-38U
- PW-2L
- PW-11Ub
- PW-13U
- PW-14U

Water removal from the Koppers Basin continued during April 2023 as needed to keep the basin free of standing water. A total of 1,115,367 gallons of water were removed from the basin during April 2023 with treatment through the Groundwater Treatment System. Visual observations during April confirmed that the basin remained free of standing water during this timeframe.

Installation of replacement extraction well PW-10Lc was completed and installation of replacement extraction well PW-10Ub was initiated during April 2023.

The routine semi-annual groundwater monitoring event including select wells on the NW Natural and adjacent Siltronic properties was completed during April 2023.

Sampling to support estimation of the effective solubility of DNAPL as approved by DEQ in e-mail correspondence dated March 16, 2023 was completed during April 2023.

Soil boring activities as described in the January 25, 2023 *Feasibility Study Comprehensive Data Gaps Work Plan*, conditionally approved by DEQ in correspondence dated February 13, 2023, began during April 2023.

A dry-weather sample of water discharging from City of Portland Outfall 22C was collected from the City of Portland Outfall 22C on April 27, 2023. This was the second dry-weather sample collected from Outfall 22C as per the DEQ-approved *Doane Creek Source Control Evaluation Workplan*.

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

- Monthly measurements of DNAPL presence at Fill WBZ wells MW-10-25, MW-43F, MW-44F, and MW-45F were conducted during April 2023. No measurable DNAPL was present in wells MW-43F or MW-44F; 0.76 feet of DNAPL was present within well MW-45F; and 0.76 feet of DNAPL was present within well MW-10-25 during April. Other than a small volume for effective solubility testing, the DNAPL from wells MW-45F (0.5 gallons) and 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.

Soil boring activities 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 during May 2023. The collection of soil embankment samples and surface sediment samples from Doane Creek will be completed pending approval of access applications that have been submitted to BNSF and Portland and Western Railroads.

Pumps and piping for extraction wells PW-10Lc and PW-10Ub will be placed and installation of replacement extraction well PW-10Uc will be initiated during May 2023.

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.

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 May 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.

### **3. LABORATORY TEST RESULTS RECEIVED DURING THE PREVIOUS MONTH**

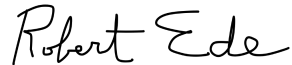
NW Natural receives test results on a regular basis as a result of routine monitoring related to groundwater quality or as specified by various permit requirements. Additionally, test results are periodically received through implementation of task-specific investigation activities resulting from agency-approved 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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