

HAHN AND ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

June 15, 2020

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Northwest Region, Portland Office
Portland Harbor Section
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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**

Mr. Bayuk:

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 May 2020. 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 May 2020, with the system operating in full long-term operational mode.

Field activities related to the *Fill Water-Bearing Zone Trench Interim Measure Field Investigation Plan*, provided to DEQ on April 30, 2020 were completed on May 7, 2020.

A total of 8,135,964 gallons of water were treated in the on-site groundwater treatment plant and discharged during May 2020 with all monitoring and reporting completed in accordance with the facility's NPDES permit.

HAI field activities related to monitoring and maintenance of the dense non-aqueous phase liquid (DNAPL) extraction system at Fill WBZ well locations MW-6-32 and MW-13-30 occurred during May 2020. The system recovered approximately 29 gallons of fluids in May, estimated to be approximately 40% DNAPL.

Weekly manual water level measurements within the former Koppers tank basin and select adjacent wells and piezometers were completed during May 2020.

Baseline DNAPL removal as needed to maintain levels below the top of the well sumps was conducted by Anchor QEA during May 2020 in the following wells near the river shoreline.

- MW-16-45
- MW-26U

- MW-30U
- MW-38U
- PW-2L
- PW-6U
- PW-13U

The following upland FS related field tasks were in progress during May 2020:

- Weekly measurements of DNAPL presence at Fill WBZ wells MW-43F, MW-44F, and MW-45F have been conducted since August 2017. During May, measurements recorded up to 0.02 feet of DNAPL in the base of well MW-43F (black; high viscosity appearance); 0.02 feet of DNAPL within well MW-44F (black oily sediment on probe tip); and up to 1.85 feet of DNAPL within well MW-45F (brown; low viscosity appearance).

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.

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

Weekly manual water level measurements within the former Koppers tank basin and select adjacent wells or piezometers will be conducted.

Quarterly groundwater sampling of select Fill WBZ wells associated with the LNG Basin groundwater monitoring evaluation will be conducted during June.

Site-wide manual groundwater elevation and DNAPL thickness measurements will be conducted during June as part of NW Natural's second quarter 2020 routine groundwater monitoring event.

A DNAPL sample will be collected for laboratory DNAPL mobility assessment testing from wells MW-43F and MW-44F should measurable thicknesses / sufficient volumes be identified at these locations during this timeframe. It is estimated that a minimum thickness of 0.5 feet of DNAPL accumulation will be necessary in order to collect sufficient sample volume for the laboratory.

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

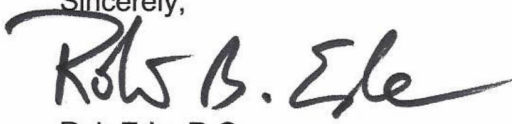
data are provided to DEQ or the permitting authority (if different than DEQ) in accordance with previously approved formats and schedules.

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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