

HAHN AND ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

August 17, 2020

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Northwest Region, Portland Office
Portland Harbor Section
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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 July 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 July 2020, with the system operating in full long-term operational mode.

A total of 8,769,552 gallons of water were treated in the on-site groundwater treatment plant and discharged during July 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 July 2020. The system recovered approximately 21 gallons of fluids in July, estimated to be approximately 40% DNAPL. The system's storage tank reached capacity during July and the extraction system was turned off July 30, 2020 pending transfer of the recovered liquids to drums for off-site transport and disposal (fuel blending).

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

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

- MW-18-30
- MW-26U
- MW-27U

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

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

- Weekly measurements of DNAPL presence at Fill WBZ wells MW-43F, MW-44F, and MW-45F have been conducted since August 2017. During July, 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 1.61 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.

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.

Coordination regarding the emptying of the MW-6/MW-13 DNAPL recovery system storage tank will occur, and the extraction system will be turned back on. The contents will be transferred to 55-gallon drums pending off-site transport for fuel blending in accordance with the current waste profile for these liquids.

The design for planned extraction well PW-8Ub will be provided to DEQ during August.

The design for the planned Fill Water Bearing Zone interceptor trench will be provided to DEQ during August.

The LNG Basin and Former Koppers Basin Groundwater Evaluation memorandum for first quarter 2020 will be provided to DEQ in August.

The HC&C Operational Figures covering the period of January through June 2020 will be provided to DEQ by August 31st.

3. LABORATORY TEST RESULTS RECEIVED DURING THE PREVIOUS MONTH

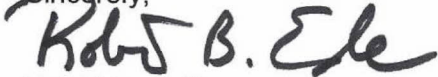
NW Natural receives test results on a regular basis as a result of routine monitoring related to groundwater quality or as specified by various permit requirements. Additionally, test results are periodically received through implementation of task-specific investigation activities resulting from agency-approved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