

HAHN AND ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

February 16, 2015

Mr. Dana Bayuk
Oregon Department of Environmental Quality
Northwest Region, Portland Office
Portland Harbor Section
2020 SW Fourth Avenue, Suite 400
Portland Oregon 97201-4987

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. Bayuk:

Hahn and Associates, Inc. (HAI) has prepared this monthly Progress Report summarizing 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 January 2015. NW Natural is completing upland investigatory 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).

1.0 Communications and Document Submittals

In e-mail correspondence to DEQ dated January 7, 2015 (Halal Voges to Dana Bayuk) Anchor QEA, on behalf of NW Natural, provided two example soil iso-concentration contour maps and a proposed submittal date for a complete uplands iso-contour map package.

Program management implementation calls were conducted with DEQ on January 8, 2015 and January 22, 2015 to discuss NW Natural program management and project schedules.

In e-mail correspondence to DEQ dated January 7, 2015 (John Edwards to Dana Bayuk) Anchor QEA, on behalf of NW Natural, provided correspondence describing NW Natural's concerns related to further testing and possible future operation of a basalt well field on the Siltronic property.

In e-mail correspondence to DEQ dated January 15, 2015 (Taku Fuji to Dana Bayuk) Anchor QEA, on behalf of NW Natural, described proposed plans for the format and production of hard copies of the December 2014 *Final Gasco HERA Report* and requested DEQ's response to the proposal.

In e-mail correspondence dated January 21, 2015 (Ben Hung to Dana Bayuk) Anchor QEA, on behalf of NW Natural, provided documentation of a January 15, 2015 call in which DEQ approved a reduction in the frequency of testing drop boxes containing source control wastewater treatment plant system residuals. DEQ provided written confirmation of the reduction in testing in e-mail correspondence dated January 21, 2015 (Dana Bayuk to Ben Hung).

A technical meeting with representatives of DEQ, EPA, NW Natural, and Siltronic was conducted via teleconference on January 23, 2015 to discuss details and status of the

MODFLOW model update and also updates as related to work being completed as per the *Fill WBZ Trench Work Plan*.

In e-mail correspondence to DEQ dated January 23, 2015 (Halal Voges to Dana Bayuk) Anchor QEA, on behalf of NW Natural, provided documentation of DEQ's approval for a schedule extension regarding submittal of iso-concentration maps for soil and groundwater. DEQ approved the schedule extension request in correspondence dated January 29, 2015 (Dana Bayuk to Halal Voges).

In correspondence dated January 29, 2015 (John Edwards to Dana Bayuk), Anchor QEA, on behalf of NW Natural, provided documentation of a January 28 teleconference with DEQ related to the planned shutdown of the Gasco HC&C extraction wells in advance of a previously approved off-shore Distributed Temperature System (DTS) investigation. In correspondence dated January 29, 2015 (Dana Bayuk to John Edwards) DEQ indicated that it does not have any objections to the HC&C system shutdown and DTS testing.

In correspondence to DEQ dated January 28, 2015 (Rob Ede to Dana Bayuk), HAI provided confirmation of a January 22, 2015 teleconference in which DEQ provided approval for NW Natural to proceed with locating work relating to a former industrial water supply well. In correspondence dated January 29, 2015 (Dana Bayuk to Rob Ede) DEQ provided caveated confirmation that investigatory work has been approved.

In correspondence dated January 30, 2015 (John Renda to Dana Bayuk) Anchor QEA, on behalf of NW Natural, submitted an electronic copy of the January 2015 *Gasco Source Control Phase 1 Testing Data Summary and Analysis Report*.

2.0 Field Work

HAI field activities related to monitoring and maintenance of the dense non-aqueous phase liquid (DNAPL) extraction system at surficial fill well locations MW-6-32 and MW-13-30 occurred during January 2015. The system recovered approximately 49 gallons of fluids in January, primarily DNAPL.

Tasks related to optimization and maintenance of the hydraulic control and containment (HC&C) system and the wastewater treatment system were conducted in January 2015.

Baseline DNAPL removal as needed to maintain at levels below the top of the well sumps was conducted by Anchor QEA during January 2015 in the following wells near the river shoreline.

- MW-18-30
- MW-26U
- MW-27U
- MW-38U
- MW-PW-2L
- PW-2L
- WS-14-161

On March 31, 2014 NW Natural discontinued discharges of treated groundwater to the sanitary sewer (Industrial Wastewater Discharge Permit 500.022). All water is now directed to NW Natural's on-site wastewater treatment plant and discharged to the

Willamette River consistent with National Pollutant Discharge Elimination System (NPDES) Permit No. 103061 (expires August 31, 2018). Results from NW Natural's NPDES effluent sampling are provided to DEQ in Discharge Monitoring Reports that are submitted on a monthly basis in accordance with the permit. As of January 31, 2015 a total of 86,422,190 gallons of treated water were discharged under the NPDES permit.

Damaged monitoring well MW-41U, installed as part of the *2014 Final SAP and QAPP for the Fill WBZ* in November 2014, was replaced in early January 2015.

3.0 Anticipated Activities February and March 2015

NW Natural and DEQ technical working group communications and meetings are anticipated to occur as needed during February and March 2015 to discuss ongoing project tasks.

Fiber Optic Distributed Temperature Sensing (DTS) testing is anticipated to be conducted along a portion of the shoreline during February.

The *HC&C Model Calibration and Validation Report* is in preparation.

NW Natural anticipates submittal to DEQ of an isoconcentration map package for Gasco Upland soil and groundwater on February 16, 2015, followed by submittal of TPH groundwater maps on February 27, 2015.

Groundwater sampling activities as described in the Integrated Groundwater Monitoring Program (combined HC&C system Performance Monitoring and the Routine Monitoring Programs) are anticipated to occur during March 2015.

Initiation of supplemental Doane Creek investigation activities remains contingent upon receipt of DEQ confirmation that the analyte list and screening levels are suitable for the Siltronic MGP Human Health and Ecological Risk Assessment. Legal access agreements with the off-site property owner (Burlington Northern Railroad) will also be necessary prior to initiation of field activities.

Transport and recycling of the oil-water mixture originating from the TCE CMMA at the Siltronic property will be scheduled following further discussion with DEQ. DEQ provided feedback regarding this item in a letter dated September 4, 2014. As suggested in DEQ's September 4 letter, Siltronic collected a sample from PW-2L for cVOC analysis in January 2015. NW Natural and Siltronic are reviewing the data and evaluating potential disposal alternatives for discussion with DEQ.

NW Natural will complete geophysical investigation activities in February in an effort to determine if the location of the former MGP-era bedrock water supply well can be determined.

The following reports and work plans for the Site have been submitted to DEQ through the date of this progress report. Unless otherwise noted, NW Natural has not received DEQ comments on these documents.

- NW Natural's June 5, 2014 request (Rob Ede to Dana Bayuk) requesting concurrence of a final proposed analyte list and screening levels for use in the Doane Creek-related FSP being conducted as part of the Siltronic property RI.
- *Human Health and Ecological Risk Assessment Report, NW Natural Gasco Site*, Prepared for Oregon DEQ by Anchor QEA, dated December 2014.

- *Gasco Source Control Phase 1 Testing Data Summary and Analysis Report*, prepared by Anchor QEA, dated January 2015.

Should you have any questions, please contact the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read "Rob Ede, R.G.", with a stylized flourish at the end.

Rob Ede, R.G.
Principal

robe@hahnenv.com

- c:
- Mr. Bob Wyatt, NW Natural (electronic only)
 - Ms. Patty Dost, Pearl Legal Group PC (electronic only)
 - Ms. Sarah Riddle, Pearl Legal Group PC (electronic only)
 - Mr. Carl Stivers, Anchor QEA, L.L.C. (electronic only)
 - Mr. John Edwards, Anchor QEA, L.L.C. (electronic only)
 - Mr. Ben Hung, Anchor QEA, L.L.C. (electronic only)
 - Mr. Ryan Barth, Anchor QEA, L.L.C. (electronic only)
 - Ms. Halah Voges, Anchor QEA, L.L.C., (electronic only)
 - Mr. Henning Larsen, DEQ NW Region (electronic only)
 - Mr. Tom Gainer, DEQ NW Region (electronic only)
 - Mr. Keith Johnson, DEQ NW Region (electronic only)
 - Mr. Myron Burr, Siltronic Corporation (electronic only)
 - Ms. Kristine Koch, Region 10 EPA (electronic only)
 - Mr. Sean Sheldrake, Region 10 EPA (electronic only)
 - Mr. Rene Fuentes, Region 10 EPA (electronic only)
 - Mr. Lance Peterson, CDM, Inc. (electronic only)