

HAHN AND ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

April 15, 2013

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 Gasco Property, 7900 NW St. Helens 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 that have occurred relating to the Gasco property during the month of March 2013. NW Natural is completing upland investigatory activities at the subject property 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 memoranda dated March 4, 11, 18, and 25 (John Renda to Dana Bayuk), Anchor QEA provided DEQ with weekly updates and field work notifications as related to the Gasco source control construction progress.

A technical meeting with DEQ and NW Natural was conducted on March 4, 2013 to discuss the draft NPDES permit for discharge of treated groundwater.

A technical meeting with DEQ and NW Natural was conducted on March 6, 2013 to discuss DEQ comments on the Risk Assessment Work Plan.

Program Management Implementation conference calls were conducted on March 7 and March 21, 2103 to discuss the NW Natural program management, project schedules and in particular, next steps related to the uplands risk assessment.

Several emails were exchanged and teleconferences occurred between DEQ and NW Natural/Anchor QEA in mid-to-late March related to technical and process items for moving forward with the uplands risk assessment.

A meeting with DEQ, EPA, NW Natural, and Siltronic was conducted on March 18, 2013 to discuss items related to the design and implementation of groundwater source control construction.

2.0 Field Work

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 March. The system recovered 20 gallons of fluids, primarily DNAPL, during this time. Approximately 2 gallons of DNAPL were manually removed from well PW-01-80 during March.

Discharge of treated water (groundwater from the LNG containment basin) to the City of Portland sanitary sewer was initiated on March 16, 2007 under Temporary Wastewater Discharge Permit 500.022 (expires February 15, 2017). Results from NW Natural's effluent sampling are provided to BES in Discharge Monitoring Reports that are submitted for any month that effluent sampling occurs – which is at least quarterly in accordance with the permit. As of March 27, 2013 a total of 2,477,052 gallons of treated water have been discharged to the sanitary sewer in 2013.

Construction of the groundwater source control extraction system and wastewater treatment building continued during March. A summary of the source control construction work completed each week and the work anticipated over the next two week period is provided in weekly memoranda to DEQ.

The First Quarter 2013 routine groundwater monitoring event was initiated in March with groundwater level measurements collected at the NW Natural and Siltronic properties on March 6, 2013. Groundwater sample collection activities commenced on March 11 and continued through the March 21, 2013.

3.0 Anticipated Activities in April and May 2013

NW Natural and DEQ technical working group communications and meetings are anticipated to occur as needed during April and May 2013 to discuss ongoing project tasks.

Construction related activities associated with the groundwater source control system will be conducted during this timeframe, with wastewater treatment plant construction and installation of the alluvium water-bearing zone extraction system pipeline and controls continuing into the second quarter of 2013.

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.

- *Source Control Evaluation Report, "Segment 3" Siltronic Property Related to NW Natural "Gasco" Site*, February 19, 2009, Anchor QEA. Based on DEQ feedback, DEQ review of this document is prioritized behind Segment 1 and 2 source control and upland risk assessment-related reviews.
- *Final Stormwater Source Control Data Summary Report*, September 2010, Anchor QEA. Based on DEQ feedback, DEQ review of this document is prioritized behind reviews for Segments 1 and 2 source control design documents and upland risk assessment-related reviews.
- *Remedial Investigation Data Summary Report, Historical Manufactured Gas Plant Activities, Siltronic Corporation Property*, March 31, 2011, HAI. Based on DEQ feedback, it is understood that DEQ review is being conducted at this time, but the priority is lower than source control and risk assessment items.
- *Supplemental Remedial Investigation Field Sampling Activities, Doane Creek Embankment Soil and Sediment, Siltronic Corporation Property*, dated March 29, 2012 (HAI, 2012).
- *Supplemental Remedial Investigation Field Sampling Activities, DNAPL Characterization, Siltronic Corporation Property*, dated April 23, 2012 (HAI, 2012).

- *Discharge of Groundwater Monitoring Purge Water, NW Natural – Gasco Property*, dated May 24, 2012 (HAI, 2012).
- *Supplemental Remedial Investigation Field Sampling Activities, Groundwater Monitoring Well Installations, Siltronic Corporation Property*, dated July 23, 2012 (HAI, 2012).
- *NW Natural Gasco Site – Uncertainty Evaluation for Control of the Hydraulic Control and Containment System*, dated February 15, 2013 (Anchor QEA, 2013).
- *NW Natural Gasco Site Groundwater Model Update Plan*, dated February 15, 2013 (Anchor QEA, 2013).
- Tables providing *Human Health Screening Levels* (Tables 1-3) and *Ecological Screening Levels* (Tables 4-7), inclusive of *MGP Observations without Associated Data* (Table 8). Provided via April 1, 2013 e-mail (Anchor QEA, 2013).
- Tables providing *Gasco Risk Assessment – Human Health Soil Data by Scenario and Exposure Area* (Tables 9-14); and *Ecological Soil Data by Scenario and Exposure Area* (Tables 15-17). Provided via April 10, 2013 e-mail (Anchor QEA, 2013).

Should you have any questions, please contact the undersigned.

Sincerely,



Rob Ede, R.G.
Principal

robe@hahnenv.com

- c:
- Ms. Sandra Hart, NW Natural (electronic only)
 - 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)
 - Mr. Henning Larsen, DEQ NW Region (electronic only)
 - Mr. Tom Gainer, DEQ NW Region (electronic only)
 - Mr. Tom McCue, 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. Chip Humphrey, Region 10 EPA (electronic only)
 - Mr. Lance Peterson, CDM, Inc. (electronic only)