

HAHN AND ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

October 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 September 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 September 3, 9, 16, 23, and 30 (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 Program Management Implementation meeting was conducted with DEQ on September 19, 2013 to discuss the NW Natural program management and project schedules.

In e-mail correspondence dated September 9, 2013 (John Edwards to Dana Bayuk), Anchor QEA, on behalf of NW Natural, submitted to DEQ the *Revised Groundwater Source Control Extraction System Test Plan, NW Natural Gasco Site*, dated September 2013.

Several emails were exchanged between DEQ and NW Natural/Anchor QEA in September related to pressure transducer measurement interval and DNAPL recovery well construction.

In e-mail correspondence dated September 11, 2013 (Dana Bayuk to John Edwards), DEQ acknowledged receipt of the *Revised Groundwater Source Control Extraction System Test Plan*.

A meeting with representatives of NW Natural, Siltronic, DEQ, and EPA was conducted on September 16, 2013 to discuss technical items and scheduling as related to upland source control construction and implementation.

In e-mail correspondence dated September 25, 2013 (Dana Bayuk to John Edwards), DEQ accepted NW Natural's request for a 45-day extension to revise the Trench Work Plan. The Trench Work plan is now due November 18, 2013.

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 September. The system recovered 9 gallons of fluids, primarily DNAPL, during this time.

Sampling of new wells and piezometers installed as part of the hydraulic source control performance monitoring program were completed during September.

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

- PW-01-80
- PW-2L
- MW-16-45
- MW-18-30
- MW-34L
- MW-38U

Discharge of treated water 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 September 27, 2013 a total of 4,428,041 gallons of treated water have been discharged to the sanitary sewer in 2013, of which 335,792 gallons was treated groundwater from the source control extraction system, with the remainder being treated groundwater from the LNG containment basin. Discharges related to the groundwater source control extraction system were initiated on September 24, 2013 in coordination with BES.

Construction of the groundwater source control extraction system and wastewater treatment system continued during September. Pumping from source control extraction wells to the treatment system was initiated for the first time on September 23, 2013 as part of startup testing procedures. A summary of the source control construction work completed each week and the work anticipated over the next two-week period has been provided in weekly memoranda to DEQ. As discussed with DEQ, the weekly construction update reports have been discontinued because the project has transitioned to startup testing of the HC&C and treatment system. The last weekly update report was sent to DEQ on September 30, 2013. At the completion of the startup testing DEQ will be provided with a summary memorandum of the primary system components and processes that were tested.

3.0 Anticipated Activities in October and November 2013

In correspondence dated October 1, 2013 (Dana Bayuk to John Edwards), DEQ provided comments on the September 2013 *Revised Groundwater Source Control Extraction System Test Plan*.

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

System start-up and testing related to the groundwater source control system will be conducted during this timeframe. Baseline DNAPL monitoring and removal, as needed to maintain at levels below the tops of the well sumps, will be conducted during the October and November timeframe.

Preparation of the Upland Human Health and Ecological Risk Assessments will continue during October. The risk assessment will be submitted to DEQ by October 24, 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.*
- *Final Stormwater Source Control Data Summary Report, September 2010, Anchor QEA.*
- *Remedial Investigation Data Summary Report, Historical Manufactured Gas Plant Activities, Siltronic Corporation Property, March 31, 2011, HAI.*
- *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).*
- *Request for Concurrence: 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).*
- *Memorandum – Wastewater Treatment Plant Construction Excavation Activities, dated August 16, 2013 (HAI, 2013).*

Should you have any questions, please contact the undersigned.

Sincerely,



Rob Ede, R.G.
Principal

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- Mr. Ben Hung, Anchor QEA, L.L.C. (electronic only)
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- Mr. Henning Larsen, DEQ NW Region (electronic only)
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- Mr. Tom McCue, Siltronic Corporation (electronic only)
- Ms. Kristine Koch, Region 10 EPA (electronic only)
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