

HAHN AND ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

June 14, 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 May 2013. NW Natural is completing upland investigatory activities at the subject property under the Voluntary Agreement No. ECVV-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 May 6, 13, 20, and 28 (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.

In e-mail correspondence dated May 3, 2013 (Dana Bayuk to Taku Fuji), DEQ provided Anchor QEA with DEQ comments and red lined versions of the HERA Screening Criteria Tables and the MGP Observation Table for use in the Gasco risk assessment.

In e-mail correspondence dated May 6, 2013 (Dana Bayuk to Taku Fuji), DEQ requested functional versions of the HERA Soil Data Use Tables.

In e-mail correspondence dated May 7, 2013 (Ben Hung to Dana Bayuk), Anchor QEA provided DEQ the requested functional versions of the HERA Soil Data Use Tables.

In e-mail correspondence dated May 16, 2013 (Dana Bayuk to Ben Hung), DEQ provided Anchor QEA with a revised version of the MGP Observation Table with observations related to the riverbank borings added.

In e-mail correspondence dated May 17, 2013 (Dana Bayuk to Taku Fuji), DEQ provided Anchor QEA with DEQ comments and red lined versions of the HERA Soil Data Use tables for use in the Gasco risk assessment.

In e-mail correspondence dated May 20, 2013 (John Edwards to Dana Bayuk), Anchor QEA, on behalf of NW Natural, provided DEQ with handouts in advance of the regularly-scheduled technical meeting scheduled for later that day.

A meeting with representatives of NW Natural, Siltronic, DEQ, and EPA was conducted on May 20, 2013 to discuss technical items and scheduling as related to upland source control construction and implementation.

In e-mail correspondence dated May 22, 2013 (Rob Ede to Dana Bayuk), HAI, on behalf of NW Natural, transmitted an electronic version of the *Environmental Monitoring Report, First and Second Quarter 2012, NW Natural Gasco Facility, Portland, Oregon* dated May 7, 2013. Hard copies were subsequently transmitted in correspondence dated May 28, 2013.

In e-mail correspondence dated May 24, 2013 (John Renda to Dana Bayuk), Anchor QEA provided notice to DEQ that quarterly sampling of new wells installed as part of the hydraulic control and containment system's performance monitoring network would be sampled in June.

Program Management Implementation meetings were conducted with DEQ on May 16 and May 30, 2013 to discuss the NW Natural program management and project schedules.

In e-mail correspondence dated May 30, 2013 (Taku Fuji to Dana Bayuk), Anchor QEA submitted responses to DEQ comments and red lines to the risk assessment tables.

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 May. Due to a valve malfunction, the system did not pump an appreciable volume of DNAPL during May. The system was repaired in early June and is now fully functional.

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 May 31, 2013 a total of 3,789,575 gallons of treated water have been discharged to the sanitary sewer in 2013.

Construction of the groundwater source control extraction system and wastewater treatment system continued during May. 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.

3.0 Anticipated Activities in June and July 2013

NW Natural and DEQ technical working group communications and meetings are anticipated to occur as needed during June and July 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 through the second quarter of 2013.

Sampling of new wells installed as part of the hydraulic control and containment system's performance monitoring network will be sampled in June. Routine groundwater monitoring activities for the second quarter 2013 (water levels and DNAPL measurements) will also be completed during June.

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).

Should you have any questions, please contact the undersigned.

Sincerely,



Rob Ede, R.G.
Principal

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- 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)