

HAHN AND ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

January 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 December 2012. 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 December 3, 10, 17, 24, 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.

A meeting with DEQ and NW Natural was conducted on December 5, 2012 to discuss items related to the design and implementation of groundwater source control construction.

In correspondence dated December 6, 2012 (Ben Uhl to Dana Bayuk), HAI transmitted the report entitled *Environmental Monitoring Report, Third and Fourth Quarter 2011, NW Natural, Gasco Facility*, dated November 26, 2012.

In e-mail correspondence dated December 6, 2012 (Dana Bayuk to John Renda), DEQ provided clarification and approval for alternate step-down seal procedures acceptable for use in construction of groundwater extraction wells.

In e-mail correspondence dated December 14, 2012 (Ben Hung to Dana Bayuk), Anchor QEA provided a draft agenda for the December 17, 2012 regularly-scheduled meeting with DEQ.

A meeting with DEQ and NW Natural was conducted on December 17, 2012 to discuss items related to the design and implementation of groundwater source control construction as well as general status updates for other outstanding items.

In e-mail correspondence dated December 21, 2012 (Ben Hung to Dana Bayuk), Anchor QEA, on behalf of NW Natural, provided responses to DEQ comments on the Wastewater Treatment Plant Building Permit, the Building Footprint Soil Sampling Report, the Greenway Permit Exemption, and the Site Development Plan. The correspondence included transmittal of the final *NW Natural and Siltronic Source Control*

Treatment Plant Site Development Plan-Revised, dated December 2012 as prepared by Severson Environmental Services, Inc.

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 December. The system was offline for troubleshooting during much of December and recovered no measurable fluids during this time. Approximately 1.5 gallons of DNAPL were manually removed from well PW-01-80 during December.

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 December 28, 2012 a total of 10,258,248 gallons of treated water have been discharged to the sanitary sewer in 2012.

Construction of the groundwater source control extraction system continued during December. The source control construction work completed and the work planned are provided in the weekly email reports to DEQ. Also, permits for construction of the groundwater source control wastewater treatment plant building were received by NW Natural week of December 10, with general building construction activities initiated shortly thereafter.

3.0 Anticipated Activities in January and February 2013

NW Natural and DEQ technical working group communications and meetings are anticipated to occur as needed during January and February 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 alluvium water-bearing zone extraction wells continuing during the first quarter of 2013.

DEQ is presently reviewing information related to the Beneficial Water Use Determination for the Alluvium Water-Bearing Zone at Gasco as discussed during May and June 2012.

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 reviews for Segments 1 and 2 Source Control Design documents 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.*
- *Work Plan, Human Health and Ecological Risk Assessment, NW Natural Gasco Site, March 2012 (Anchor QEA, 2012).*
- *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

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)