

HAHN AND ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

February 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 January 2013. NW Natural is completing upland investigatory activities at the subject property under the Voluntary Agreement No. ECV-C-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 January 7, 14, 21, 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.

Meetings with DEQ and NW Natural were conducted on January 11, 17, and 31 to discuss development of a programmatic schedule for project milestones, deliverables, and review timeframes.

In e-mail correspondence dated January 16, 2013 (Rob Ede to Dana Bayuk), HAI provided a summary and proposed path forward for completion of the DEQ-required focused "hot spot" removal of near-surface soil beneath the footprint of the future wastewater treatment building.

A meeting with representatives of Siltronic and NW Natural was conducted on January 17, 2013 to discuss the coordination and integration of current (routine) and planned future (source control performance) groundwater monitoring programs as related to the Gasco and Siltronic properties.

In e-mail correspondence dated January 17, 2013 (Dana Bayuk to Ben Hung), DEQ provided comments from review of NW Natural responses/revisions to the Greenway Permit Exemption and the Site Development Plan.

In e-mail correspondence dated January 17, 2013 (Dana Bayuk to Rob Ede), DEQ discussed the adequacy of the removal of visibly-impacted "hot spot" soil beneath the footprint of the future wastewater treatment plant building. In the same e-mail, DEQ provided NW Natural with approval to continue with the construction of the treatment plant building without the need for further removal of contaminated soil.

In e-mail correspondence dated January 28 (Ben Hung to Dana Bayuk) and 29 (Dana Bayuk to Ben Hung), the agenda for the regularly-scheduled monthly meeting with representatives of NW Natural and DEQ, to be held on January 30, 2013, was established.

In e-mail correspondence dated January 29 (Dana Bayuk to John Renda) DEQ provided feedback as related to source control construction-related activities anticipated to occur the following week. Anchor QEA, on behalf of NW Natural, provided a response to the DEQ feedback in e-mail correspondence (John Renda to Dana Bayuk) of the same date.

In e-mail correspondence dated January 29, 2013 (Ben Hung to Dana Bayuk), Anchor QEA, on behalf of NW Natural, provided responses to January 11, 2013 comments from DEQ related to the Greenway Permit Exemption and the Site Development Plan. Included with this response was the Final Site Development Plan, modified as per DEQ's comments.

A regularly scheduled meeting with representatives of DEQ, EPA, Siltronic, and NW Natural was conducted on January 30, 2013 to discuss technical items and status as related to ongoing source control construction, as well as other items that are pending DEQ review. DEQ provided approval of the Final Site Development Plan, submitted by Anchor QEA on January 29, during this meeting.

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 January. The system recovered 12 gallons of fluids, primarily DNAPL, during this time. Approximately 3 gallons of DNAPL were manually removed from well PW-01-80 during January.

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 January 30, 2013 a total of 1,076,928 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 January. Also, DEQ-directed removal of hot spot soil from areas beneath the footprint of the future wastewater treatment building was completed in January. 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 February and March 2013

NW Natural and DEQ technical working group communications and meetings are anticipated to occur as needed during February and March 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.

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; DEQ comments were received February 13, 2013).
- *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,

A handwritten signature in black ink, appearing to read 'Rob Ede', followed by a long horizontal flourish.

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)