

**HAHN AND ASSOCIATES, INC.**  
ENVIRONMENTAL CONSULTANTS

February 15, 2011

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 2011. 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 e-mail correspondence dated January 4, 2011 (Dana Bayuk to Bob Wyatt), DEQ provided information regarding the coordination of meetings with NW Natural for discussion of the path forward for upland risk assessment and groundwater source control planning and design.

In e-mail correspondence dated January 6, 2011 (John Edwards to Dana Bayuk), Anchor QEA, on behalf of NW Natural, requested DEQ review of NW Natural plans for hydraulic conductivity testing of select wells at Gasco. This correspondence also included a description of the anticipated field schedule.

During a telephone conversation on January 11, 2011 (Dana Bayuk to John Edwards), DEQ provided conditional approval of NW Natural's January 6, 2011 plan for the hydraulic conductivity testing of select wells at the Gasco property.

In multiple e-mail correspondence dated January 11, 2011 and January 14, 2011 between Dana Bayuk and John Edwards, DEQ and Anchor QEA described agreements and clarifications regarding the hydraulic conductivity testing of select wells at Gasco, with DEQ concurrence and final approval of all elements of the testing plan being provided in e-mail correspondence dated January 14, 2011 (Dana Bayuk to John Edwards).

In e-mail correspondence dated January 14, 2011 (Dana Bayuk to Bob Wyatt), DEQ provided a reminder to NW Natural regarding an agreement to submit an interim data package to DEQ providing results of Segment 2 capture zone field testing activities and also providing a date by which this package should be submitted. In correspondence the same day, NW Natural (Bob Wyatt to Dana Bayuk) acknowledged this agreement and confirmed that NW Natural would have the data package to DEQ by the requested date. On January 20 Anchor QEA provided EPA and DEQ with the data summary

requested by DEQ. On January 27 DEQ sent NW Natural an e-mail requesting further information on the January 20 submittal by February 4. NW Natural began preparation of further information with the goal of responding to DEQ's request by February 4.

*An Environmental Monitoring Report, First and Second Quarter 2010, NW Natural Gasco Facility, Portland, Oregon*, dated January 14, 2011 was submitted by HAI on behalf of NW Natural to DEQ via ftp upload on January 18, 2011.

In e-mail correspondence dated January 19, 2011 (Dana Bayuk to Bob Wyatt), DEQ provided NW Natural with a list of topics for discussion in advance of a planned meeting with NW Natural to discuss key issues regarding completion of the human health and ecological risk assessments for the Gasco property.

In correspondence dated January 24, 2011 (John Edwards to Sean Sheldrake and Dana Bayuk), Anchor QEA, on behalf of NW Natural, informed EPA and DEQ that NW Natural will be testing Variable Frequency Drive (VFD) well pumps as part of source control design planning for shoreline extraction wells.

A meeting with representatives of NW Natural and DEQ was conducted on January 25, 2011 to discuss key elements regarding completion of the human health and ecological risk assessments for the Gasco property.

In e-mail correspondence dated January 31, 2011 (Dana Bayuk to Bob Wyatt), DEQ provided NW Natural with a list of topics for discussion in advance of a planned meeting with NW Natural to discuss key issues regarding completion of groundwater source control planning and design for the Gasco and northern portion of the Siltronic shoreline (i.e., shoreline segments 1 and 2).

## **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 approximately 24 gallons of fluids (primarily DNAPL) during January. The system was modified in January so that the pump could readily be operated by either the solar rechargeable battery-powered air compressor, or with use of compressed nitrogen gas. This modification ensures continued operation of the system during extended periods of low-light / overcast conditions.

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, 2012). Results of 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 every other month in accordance with the permit. As of January 27, 2011, a total of 2,081,652 gallons of treated water have been discharged to the sanitary sewer in 2011.

### 3.0 Anticipated Activities in February and March 2011

In February and March, DEQ and NW Natural technical teams will meet to discuss completion of the upland human health and ecological risk assessments for Gasco, as well as preparation the draft final design document for HC&C source control along shoreline segments 1 and 2 at the Gasco and Siltronic properties.

On February 2 Anchor QEA sent EPA and DEQ an e-mail providing responses to DEQ's January 27 request for further information on the January 20 Segment 2 test data report.

A Data Summary Report documenting activities and transmitting results of NW Natural's RI activities completed to date on the Siltronic property will be submitted to DEQ in March.

First quarter 2011 groundwater monitoring activities are scheduled to occur during the second half of March.

The following reports and work plans on the Site have been submitted to DEQ for review and comment.

- Source Control Evaluation Report, "Segment 3" Siltronic Property Related to NW Natural "Gasco" Site, February 19, 2009, Anchor QEA.
- Evaluation of potential method produced biases associated with available cyanide method OIA-1677, August 14, 2009, Anchor QEA.
- Gasco Upland – Proposal on Risk Methods, June 21, 2010, Anchor QEA.
- Intent to dispose of non-hazardous petroleum-contaminated IDW soils generated by NW Natural on the Siltronic Corporation property, August 5, 2010, HAI.
- Recommendations for cyanide testing at the Gasco Site, August 17, 2010, Anchor QEA.

Should you have any questions, please contact the undersigned.

Sincerely,

A handwritten signature in blue ink that reads "Rob Ede". The signature is stylized and cursive.

Rob Ede, R.G.  
Principal

[robe@hahnenv.com](mailto: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)  
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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)  
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Mr. Chip Humphrey, Region 10 EPA (electronic only)  
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