

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

February 15, 2012

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 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 correspondence dated January 3, 2012 (Tim Stone to Scott Flaherty), Anchor QEA, LLC (AQ) provided waste characterization data to Stratus Corp. for coordination of disposal of 21 55-gallon drums of petroleum contaminated soil cuttings at the Waste Management Inc., Subtitle D Landfill in Hillsboro, Oregon. These soils were generated as investigation-derived waste (IDW) during a shoreline area Sediment Data Gaps project.

In correspondence dated January 4, 2012 (Rob Ede to Kristin Castner), HAI provided waste characterization data to Waste Management, Inc. for coordination of disposal of 20 55-gallon drums of petroleum contaminated soil cuttings at the Subtitle D Landfill in Hillsboro, Oregon. These soils were generated as (IDW) during monitoring well abandonment and replacement activities.

In correspondence dated January 5, 2012 (Jim Anderson to Bob Wyatt), DEQ directed NW Natural to complete the Gasco upland risk assessment as provided in that letter. The January 5, 2012 letter also included DEQ's beneficial water use determination following its review of HAI's October 21, 2011 *Updated Beneficial Use Determination for Groundwater* and DEQ's review of AQ's October 31, 2011 *Cyanide Screening Level Technical Memorandum*.

In e-mail correspondence dated January 10, 2012 (Ben Hung to Dana Bayuk) and as follow-up to a telephone call, AQ recommended cancelling the regularly scheduled Gasco project meeting for January.

In e-mail correspondence dated January 11, 2012 (Dana Bayuk to Ben Hung), DEQ concurred that the regularly scheduled meeting would not be necessary, but requested a

teleconference for a later date to review DEQ questions related to several items as described in NW Natural's December 21, 2011 letter on the source control framework.

A meeting/teleconference with representatives of NW Natural, DEQ, and EPA was held on January 18, 2012 to discuss groundwater source control framework, scheduling, and document review prioritization items.

In e-mail correspondence dated January 24, 2011 (Dana Bayuk to Rob Ede), DEQ provided clarification regarding the timing of the review comments on the October 31, 2011 *Cyanide Screening Level Technical Memorandum*. DEQ's comments regarding this item are included in their January 5, 2012 letter regarding the upland risk assessment.

The *Draft Revised Groundwater Source Control Construction Design Report (CDR)* was submitted to DEQ on behalf of NW Natural by AQ on January 31, 2012. Along with the CDR three other documents were submitted to DEQ.

- Wastewater Treatment Final Design Report (Sevenson, 2012)
- Upper Alluvium Extraction Well Design Work Plan (Anchor QEA, 2012)
- Work Plan to Assess Baseline Groundwater Conditions (Anchor QEA, 2012)

DEQ no longer maintains the shared FTP site and so the CDR, accompanying documents and other project documents have not been uploaded.

## **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 16 gallons of fluids (primarily DNAPL) during January. Additionally, 14 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, 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 31, 2012 a total of 1,090,480 gallons of treated water have been discharged to the sanitary sewer in 2012.

Twenty (20) 55-gallon drums of petroleum contaminated soils as were described in correspondence dated January 4, 2012 and were generated by NW Natural on the Gasco property as part of monitoring well abandonment and installation activities were loaded and transported for disposal to the Waste Management Subtitle D Landfill in Hillsboro Oregon on January 10 and January 20, 2012. These soils were disposed under Waste Management, Inc. Permit No. 107985OR.

A stockpile and two drop boxes containing soil generated during construction and utility work at the NW Natural LNG plant area were sampled for disposal characterization purposes by HAI on January 20, 2012.

### 3.0 Anticipated Activities in February and March 2012

NW Natural will respond to DEQ's January 5, 2012 correspondence providing direction on remaining upland risk assessment issues and the beneficial water use determination for the NW Natural Gasco site (response provided in correspondence dated February 1, 2012).

NW Natural will submit a Wastewater Permit Application to the City of Portland for renewal of industrial wastewater discharge permit #500.022 for ongoing discharge of treated groundwater to the sanitary storm sewer (submitted February 7, 2012).

Push probe drilling to gather data to assist with extraction well design is anticipated to occur in February, contingent upon DEQ approval of the Upper Alluvium Extraction Well Design work plan as included with the CDR. Conditional approval was provided in DEQ's February 10 email. Acceptance of DEQ's revised conditions was provided in a February 10 email from Anchor QEA to DEQ and the borings are scheduled to start February 17.

TarGOST borings for baseline DNAPL monitoring are also planned to occur in February/March, contingent upon receipt of DEQ approval of the Work Plan to Assess Baseline Groundwater Conditions that was included with the CDR.

NW Natural and DEQ technical working group meetings are anticipated to occur during February and March 2012, as needed, so that discussion of critical items related to upland risk assessment and groundwater source control tasks may be conducted.

The First Quarter 2012 routine groundwater monitoring event is anticipated to occur during this timeframe.

The following reports and work plans for the Site have been submitted to DEQ through the end of January. Unless otherwise noted, these reports and work plans have not received DEQ review and comment.

- *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.
- *Draft Revised Groundwater Source Control Construction Design Report*, January 31, 2012, Anchor QEA. Based on DEQ feedback, review of this document is of the highest priority – with review of Upper Alluvium and Baseline Monitoring Workplans and the Treatment System Design Report first so that implementation may proceed while the remaining document undergoes review.

Should you have any questions, please contact the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rob Ede', with a long horizontal flourish extending to the right.

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)
- 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)