

December 15, 2009

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 November 2009. NW Natural is completing upland investigatory activities at the subject property under the Voluntary Agreement No. ECVC-WMCVC-NWR-94-13 between NW Natural and the Oregon Department of Environmental Quality (DEQ).

1.0 Communications and Document Submittals

In correspondence dated November 3, 2009 (Ryan Barth to Sean Sheldrake), Anchor QEA, on behalf of NW Natural, provided additional responses to DEQ comments dated October 26, 2009 and EPA comments dated October 28, 2009 generated from their review of the *Capture Zone Field Test Plan*, dated October 8, 2009.

In correspondence dated November 6, 2009 (John Edwards to Dana Bayuk), Anchor QEA, on behalf of NW Natural submitted the *Source Control Interim Design Report* to DEQ for their review.

In correspondence dated November 8, 2009 (Ryan Barth to Sean Sheldrake), Anchor QEA, on behalf of NW Natural, provided *revised* additional responses to DEQ comments dated October 26, 2009 and EPA comments dated October 28, 2009 generated from their review of the *Capture Zone Field Test Plan*, dated October 8, 2009. The November 8, 2009 submittal superseded the November 3, 2009 submittal.

In correspondence dated November 9, 2009 (Ryan Barth to Sean Sheldrake), Anchor QEA, on behalf of NW Natural, provided responses to USEPA comments dated October 28, 2009 on the Health and Safety Plan, Appendix C of the *Capture Zone Field Test Plan*, dated October 8, 2009.

In e-mail correspondence dated November 11, 2009 (Sean Sheldrake to Ryan Barth, Bob Wyatt, and Tom McCue), EPA provided notice that NW Naturals November 9, 2009 responses to EPA and DEQ comments on the *Capture Zone Field Test Plan* were

acceptable, but that additional revisions to the Health and Safety Plan, Appendix C of the *Capture Zone Field Test Plan*, dated October 8, 2009 were still necessary. In a November 15 e-mail from Sean Sheldrake to Ryan Barth EPA indicated that they had no further comments on the HASP and authorized work to begin.

In correspondence dated November 17, 2009 (Rob Ede to Dana Bayuk), HAI, on behalf of NW Natural, provided DEQ with a proposed plan for abandoning and replacing wells MW-13-61R and MW-16-125. These are wells that have suspected integrity breaches with regard to their grout seals.

In correspondence dated November 18, 2009 (Rob Ede to Dana Bayuk), HAI, on behalf of NW Natural, provided DEQ with waste characterization data and a request for treatment and disposal of approximately 100 gallons of decontamination/purge water generated within the spent trichloroethene (TCE) F002 Contaminated Media Management Area (CMMA).

2.0 □ Field Work

Field activities related to the incorporation of automated DNAPL recovery at the MW-13-30 well location occurred in November. Specifically, during the first week of November, the pump at the MW-13-30 location was plumbed to the existing DNAPL storage tank and the new controller and compressor were installed to operate DNAPL recovery from both the MW-6-32 and the MW-13-30 well locations. System adjustments with regard to the solar array, battery hook-up, and the controller settings were conducted during the remainder of November in order to bring the system on-line and to optimize DNAPL recovery through varying the cycle number and duration for each well location. During November, approximately 27 gallons of DNAPL / water was pumped from wells MW-6-32 and MW-13-30 (combined). Based on visual observations during select pumping cycles, it is estimated that approximately 90% to 100% of the liquid pumped in November from MW-13-30 was DNAPL, while approximately 30% to 50% of the liquid pumped from MW-6-32 was DNAPL. System optimization is on-going.

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 November 30, 2009, a total of 7,195,496 gallons of treated water have been discharged to the sanitary sewer in 2009.

The offshore piezometer installation activities as proposed within the EPA-approved *Capture Zone Field Test Plan* were initiated with mobilization to the site on November 16, 2009. The piezometer installation activities continued through the remainder of November and into the first week of December.

Ongoing visual sheen monitoring, consistent with a DEQ-approved monitoring plan, of the boom / sheen containment area immediately offshore of the Gasco/Siltronic property boundary were conducted during November.

On November 9 and 20, 2009 Anchor QEA conducted stormwater sampling for the WR-107 outfall in accordance with the October 23, 2008 *Draft Source Control Data Gaps Catch Basin Sediment Sampling Report* and as per DEQ's September 14, 2009.

3.0 Anticipated Activities in December 2009 and January 2010

Meetings with NW Natural and DEQ will occur through December 2009 and January 2010 as needed to expedite discussions and resolution of issues concerning design of groundwater/DNAPL source control, as well as other project related items such as upland risk assessment and feasibility study activities.

Efforts will be made during the indicated timeframe to resolve the discharge location of the single existing catch basin in the Koppers Leasehold area that does not reportedly drain to the Koppers stormwater tankfarm for discharge to the City of Portland sanitary sewer system.

An Environmental Monitoring Report, to include groundwater elevation maps, DNAPL thickness measurements, and final laboratory data and validation reports for the first and second quarters of 2009 is anticipated to be available for submittal to DEQ during the indicated timeframe.

A letter confirming the routine groundwater monitoring schedule for the Gasco and Siltronic Site during 2010 will be provided to DEQ during January.

Installation of the offshore piezometers for the Segment 2 Capture Zone test was completed in early December and field development of the piezometer screens will be completed in December. We are waiting to install upland extraction wells PW-7, 8, and 9 and monitoring wells until we have EPA approval of the well design in the Capture Zone Field Test plan.

Sevenson Environmental Services (SES) is preparing the groundwater treatment system Pilot Study Report.

Remedial Investigation activities anticipated to be conducted by NW Natural at the Siltronic property during the specified timeframe include the initiation of Doane Creek sampling-related activities including shallow soil sampling, sediment sampling, and stormwater sampling activities. Reconnaissance of the Doane Creek drainage will be conducted in December (completed December 4), with necessary clearing of vegetation and sample station establishment being anticipated to occur in January.

Those RP-series wells located at the Siltronic property that have not yet been sampled for RI-related COIs are anticipated to be sampled in January 2010.


Adjustments to the cycle frequency and duration for both the MW-13-30 and the MW-6-32 DNAPL recovery locations will continue through December and into January, as necessary to optimize the DNAPL recovery rates with the recently installed compressor and controller system.

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

- Revised Baseline Ecological and Human Health Risk Assessment Report, December 2004, Anchor Environmental, LLC.
- Remedial Investigation Report, NW Natural – Gasco Facility, 7900 NW St. Helens Road, Portland, Oregon, April 30, 2007, Hahn and Associates, Inc.
- 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.
- Proposed Revision to Environmental Controls and Sheen Monitoring at the Gasco/Siltronics Property Boundary, October 5, 2009, Anchor QEA
- Interim Design Report for Source Control, November 6, 2009, Anchor QEA
- Plan for Monitoring Well Abandonment and Replacement (MW-13-61R and MW-16-125), November 17, 2009, HAI
- Waste Characterization Results and Request for Treatment and Disposal Concurrence, November 18, 2009, HAI.

Should you have any questions, please contact the undersigned.

Sincerely,



Rob Ede, R.G.
Principal

robe@hahnenv.com

- c: Ms. Sandra Hart, NW Natural
Mr. Bob Wyatt, NW Natural
Ms. Patty Dost, Pearl Legal Group PC (electronic only)
Mr. Carl Stivers, Anchor QEA, L.L.C.
Mr. John Edwards, Anchor QEA, L.L.C.
Mr. Henning Larsen, DEQ NW Region
Mr. Tom Gainer, DEQ NW Region (electronic only)
Mr. Tom McCue, Siltronic Corporation
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. Eric Blischke, Region 10 EPA (electronic only)
Mr. Chip Humphrey, Region 10 EPA (electronic only)
Mr. Lance Peterson, CDM, Inc. (electronic only)