

July 16, 2010

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 June 2010. 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

A document entitled *Environmental Monitoring Report, Third and Fourth Quarter 2009, NW Natural Gasco Facility*, dated June 4, 2010 was submitted to DEQ on behalf on NW Natural by HAI on June 4, 2010. The document was posted electronically to the DEQ ftp site on June 7, 2010.

In e-mail correspondence dated June 10, 2010 (Ben Hung to Dana Bayuk), Anchor QEA provided a description of various coordination items in advance of a scheduled June 21, 2010 technical meeting to be attended by representatives of NW Natural and DEQ.

In e-mail correspondence dated June 11, 2010 (Dana Bayuk to Bob Wyatt), DEQ provided NW Natural with a description of its "project decision" regarding the implementation of Source Control Measures (SCMs) for Shoreline Segment 1. In e-mail correspondence dated June 14, 2010 (Dana Bayuk to Bob Wyatt), DEQ provided its understanding of the objectives for the upcoming June 21 technical meeting.

In e-mail correspondence dated June 15, 2010 (Tim Stone to Mark Krening), Anchor QEA provided two data packages requesting Waste Management, Inc. acceptance for the disposal of non-hazardous soil investigation-derived wastes (IDW) that were generated by NW Natural under the direction of Anchor QEA at the NW Natural Gasco property. Mr. Dana Bayuk (DEQ) was copied on these requests for informational purposes.

In e-mail correspondence dated June 17, 2010 (Ben Uhl to Kristin Castner), HAI provided one data package requesting Waste Management, Inc. acceptance for the

disposal of non-hazardous soil IDW that were generated by NW Natural under the direction of HAI at the Siltronic Corporation property. Mr. Dana Bayuk (DEQ) was copied on this request for informational purposes.

In correspondence dated June 18, 2010 (Ben Hung to Dana Bayuk), Anchor QEA, on behalf of NW Natural, provided DEQ with a description of NW Natural's objectives for the upcoming technical meeting with DEQ scheduled for June 21, 2010.

In correspondence dated June 21, 2010 (Ben Hung and Amy Nelson to Dana Bayuk), Anchor QEA, on behalf of NW Natural, submitted to DEQ a memorandum providing a detailed description of NW Natural's proposed compromise methods and approaches for revising the Human Health and Ecological Risk Assessment documents with the goal of appropriate and timely initiation of the Upland Feasibility Study.

A NW Natural/DEQ technical meeting, established to discuss NW Natural's proposed path forward for completion of the upland Risk Assessment was conducted on June 21, 2010.

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 June. During June, approximately 65 gallons of DNAPL / water were pumped from wells MW-6-32 and MW-13-30 (combined). Based on visual observations during select pumping cycles, it is estimated that approximately 60% to 65% of the liquid pumped in June from these wells was DNAPL. During June, MW-6-32 was programmed to pump for four 8-minute cycles per day (unchanged), while the program for well MW-13-30 was updated from two 20-minute cycles per day to a new program consisting of one 60-minute cycle per day. The longer cycle duration was found to decrease the overall fraction of water removed from well MW-13-30.

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 June 30, 2010, a total of 7,999,314 gallons of treated water have been discharged to the sanitary sewer in 2010.

Doane Creek embankment soil sampling activities on the BNSF property were completed from June 14 through June 16 as part of NW Natural's RI activities as related to the adjacent Siltronic property.

Dedicated tubing and stainless steel foot valves were emplaced within select wells that were installed as part of planned source control performance monitoring activities as described in Table 4-4 of the November 2009 Anchor QEA-prepared Interim Design Report. The specific wells include: OW-7-17, OW-8-15, OW-9-25, MW-22-80, MW-23-27, MW-23-75, MW-23-123, MW-24-70, and MW-24-130. These wells were subsequently sampled on June 22, 2010 as part of the Second Quarter 2010 groundwater monitoring event. Piezometers within the PZ-5 well cluster (PZ-5-5, PZ-5-20, PZ-5-55, and PZ-5-85) have been proposed for inclusion the sampling event, but river levels remained too high to access them for sampling during June. As specified in

the Interim Design Report, all of the preceding performance monitoring wells will be incorporated into a routine (annual) monitoring program subsequent to start-up of upland source control activities.

Capture zone field testing using Shoreline Segment 2 wells PW-7, -8, and -9, initiated in April 2010, continued during May as per the EPA approved Capture Zone Field Test plan. A memorandum *Capture Zone Field Test Status Report and Plan to Install Upper Alluvium Test Well* (Anchor QEA) was sent to Sean Sheldrake on June 24, 2010. Sheldrake approved the workplan in a June 25 e-mail. Construction of pilot extraction well PW-8-37 began in June and will continue in July.

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 June.

3.0 Anticipated Activities in July and August 2010

A memorandum *Capture Zone Field Test Plan Addendum* was submitted to EPA and DEQ on July 15, 2010. The memo contains a revised plan to conduct additional pump tests in Gasco Segment 2, including pumping from new pilot extraction well PW-8-37.

NW Natural invoked dispute resolution concerning the matters stated in Dana Bayuk's June 11, 2010 e-mail on July 14, 2010.

Regularly scheduled monthly meetings with NW Natural and DEQ are anticipated to occur in July and August to discuss ongoing technical items predominated by groundwater source control, risk assessment and feasibility study issues.

Doane Creek sediment sampling activities, part of NW Natural's RI activities as related to the Siltronic property, will be completed in July (completed July 1). Surveying of the location and elevation of staff gauges established within the creek will also occur in July to be followed by the first of 4 planned seasonal surface water sampling events (dry season), to occur in the July through September time-frame (weather pattern dependent).

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.
- Proposed Revision to Environmental Controls and Sheen Monitoring at the Gasco/Siltronic Property Boundary, October 5, 2009, Anchor QEA
- Historical Sheen Occurrences at the Gasco/Siltronic Property Boundary and Request for Approval of Revised Containment Structure Configuration, April 6, 2010.

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)