

November 16, 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 October 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 e-mail correspondence dated October 2, 2009 (John Renda to Dana Bayuk), Anchor QEA, on behalf of NW Natural, provided responses to DEQ's September 30, 2009 correspondence (Dana Bayuk to John Edwards), requesting additional information related to Section 3.3 of the September 2009 "*Capture Zone Field Test Plan*".

In correspondence dated October 5, 2009 (Tim Stone to Dana Bayuk), Anchor QEA, on behalf of NW Natural, provided DEQ with a proposed revision to the offshore environmental controls (containment boom) and sheen monitoring program presently in place for the Gasco/Siltronic property boundary area.

In correspondence dated October 8, 2009 (Dana Bayuk to Bob Wyatt), DEQ provided both EPA and DEQ comments on Section 3.3 of the Anchor QEA September 2009 document "*Capture Zone Field Test Plan*" as was provided to EPA on behalf of NW Natural in accordance with an EPA Order. An expedited review was provided in effort to allow the field work to proceed during the current in-water work window.

In e-mail correspondence dated October 9, 2009 (Sean Sheldrake to Bob Wyatt), EPA clarified that the joint DEQ/EPA comment set as forwarded on October 8, 2009 by DEQ would serve as comments for the purposes of the in-water Administrative Order on Consent (AOC) with NW Natural.

In correspondence dated October 13, 2009 (Dana Bayuk to Rob Ede), DEQ provided approval for NW Natural to proceed with installation and operation of the previously

proposed automated DNAPL recovery system at the MW-13-30 well location. DEQ's approval was based on supplemental information provided by HAI in e-mail correspondence dated October 8, 2009 (Rob Ede to Dana Bayuk).

In e-mail correspondence dated October 14, 2009 (Rebecca Goldberg to Dana Bayuk), Anchor QEA, on behalf of NW Natural, notified DEQ of the submittal/posting of two documents to the DEQ website. The submitted documents, both prepared by Anchor QEA, include the *Final Source Control Data Gaps Catch Basin Sampling Report*, dated October 2009 and the *Response to DEQ Comments on the Source Control Data Gaps Work Plan (Section 2) and the Catch Basin Sediment Sampling Report for the NW Natural Gasco Site*, dated October 14, 2009. The revised report and specific responses were provided as requested by DEQ in a September 14, 2009 comment letter.

A meeting with representatives of NW Natural and DEQ was conducted on October 19, 2009 to discuss pending offshore investigation activities as well as other project related items such as upland risk assessment and interim source control design issues.

In correspondence dated October 23, 2009 (Ryan Barth to Sean Sheldrake and Dana Bayuk), Anchor QEA, on behalf of NW Natural, provided a joint response to EPA and DEQ comments (Dana Bayuk to Bob Wyatt dated October 8, 2009) generated from their review of the September 2009 Anchor QEA *Capture Zone Field Test Plan*.

In e-mail correspondence dated October 26, 2009 (Dana Bayuk to Bob Wyatt), DEQ provided comments from review of the October 23, 2009 Anchor QEA Response to USEPA and DEQ Comments-Capture Zone Field Test Plan. In this correspondence, DEQ indicates they are deferring to EPA for comment and approval of all offshore work proposed in the Test Plan but that upland-related activities as proposed in the Test Plan, will require DEQ review and approval.

In correspondence dated October 28, 2009 (Sean Sheldrake to Bob Wyatt and Tom McCue), EPA provided comments from their review of the October 23, 2009 NW Natural Response to EPA and DEQ Comments dated October 8, 2009. In their review, EPA requested additional responses to their most recent comments and also indicated that comments on the Health and Safety Plan for the proposed work are pending, and that adequate responses to those comments would be necessary before work may proceed.

2.0 □ Field Work

Field activities related to monitoring and maintenance of the dense non-aqueous phase liquid (DNAPL) extraction system at the surficial fill MW-6-32 well location occurred during October. Approximately 35 gallons of DNAPL / water was pumped from well MW-6-32 during October. Based on visual observations during select pumping cycles, it is estimated that between approximately 35 to 75% of the liquid pumped in October was DNAPL. In an effort to increase the percentage of DNAPL recovered (versus water), on October 16, 2009 the system was updated such that it will operate for three 10-minute cycles per day (every 8 hours) instead of the former setting of six 10-minute cycles per day (every 4 hours). This will allow additional time for DNAPL to recharge the well prior to the initiation of the next pumping cycle. Further, because the recovery system's above-ground storage tank (AST) was nearing capacity, on October 27, 2009 Thermo

Fluids, Inc. pumped 489 gallons of DNAPL and water from the AST for transport to their facility for re-refining. The previous pumping out of the tank occurred in June 2008.

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 October 28, 2009, a total of 6,300,684 gallons of treated water have been discharged to the sanitary sewer in 2009.

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 October.

3.0 Anticipated Activities in November and December 2009

Meetings with NW Natural and DEQ will occur through November and December 2009 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.

NW Natural will conduct 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 letter during the indicated time-frame – weather dependent. Further, efforts are being made 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 in November or early December 2009.

Remedial Investigation activities anticipated to be conducted by NW Natural at the Siltronic property during the specified time-frame (access agreement executed in September) include the initiation of Doane Creek sampling-related activities including shallow soil sampling, sediment sampling, and stormwater sampling activities.

A work plan describing the proposed abandonment of wells MW-13-61R and MW-16-125 is anticipated to be provided to DEQ for review during November.

Efforts to access RP-series wells located at the Siltronic property for groundwater monitoring activities as described in the RI Workplan will continue in the fourth quarter 2009 since access issues were not resolved during the third quarter.

Installation and start-up of the automated DNAPL recovery system will be initiated at the MW-13-30 location during November.

The following activities in support of groundwater source control are in progress.

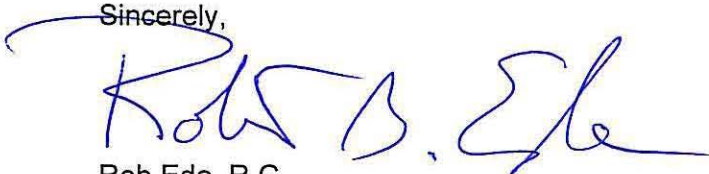
- Anchor QEA is preparing the source control Interim Design Report, to be submitted to the DEQ on or before November 7, 2009 (submitted November 6, 2009).
- Anchor QEA prepared a technical response to the October 28, 2009 letter from DEQ and EPA regarding the Segment 2 Capture Zone Test Plan. EPA reviewed the revisions to the plan and authorized installation of the offshore piezometers on November 15, 2009. Mobilization to the site began November 16, 2009.

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

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)