

HAHN AND ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

November 27, 2007

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 2007. 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 October 2, 2007 (Mr. Dana Bayuk to Mr. Bob Wyatt), DEQ provided approval of the *Final Field Sampling Plan, Cyanide Surface Water Investigation, Gasco Groundwater Source Evaluation*, dated September, 2007. In their approval, DEQ acknowledged that the Final FSP reflected agreements between DEQ and NW Natural regarding implementation and adequately addresses DEQ's August 30, 2007 comments/requirements.

In correspondence dated October 2, 2007 (Mr. Dana Bayuk to Mr. Bob Wyatt), DEQ provided approval of the "*Proposed Groundwater Seepage Meter Deployment Scope of Work – Gasco Site*", dated August 22, 2007 and the "*Proposed Transition Zone Water (TZW) Tidal Influence Study Scope of Work – Gasco Site*", dated August 22, 2007. DEQ previously provided verbal approval for these documents on September 27, 2007.

In correspondence dated October 9, 2007 (Mr. Dana Bayuk to Mr. Bob Wyatt), DEQ provided approval of NW Natural's request for approval to dispose of an approximate 700 cubic yard stockpile of impacted soil as described within "*Disposal of Petroleum-Contaminated Soil, NW Natural Gasco Site*", dated September 18, 2007. These soils were generated from federally-mandated pipeline integrity testing work that occurred at the Gasco property from September 2006 through July 2007. DEQ further provided written follow-up to their previous verbal approval to treat groundwater generated from the Siltronic pipeline excavation work through NW Natural's on-site granular activated carbon treatment unit prior to discharge to the municipal sanitary sewer system under permit with the City of Portland.

On October 12, 2007 Anchor Environmental, LLC, on behalf of NW Natural, submitted to the DEQ the *Groundwater/DNAPL Source Control Focused Feasibility Study, dated October 2007*.

On October 19, 2007 Hahn and Associates, Inc., on behalf of NW Natural, submitted to DEQ the *Final Remedial Investigation Work Plan, Historical Manufactured Gas Plant Activities, Siltronic Corporation Property, 7200 NW Front Avenue, dated October 19, 2007* (Mr. Rob Ede to Mr. Dana Bayuk).

A meeting with representatives of DEQ and NW Natural occurred on October 23, 2007 to discuss the recently submitted *Groundwater and DNAPL Focused Feasibility Study (GWFFS)*.

In e-mail correspondence dated October 29, 2007 (Mr. Dana Bayuk to Mr. Tim Stone), DEQ provided a summary of their understanding of the status of investigation-derived waste (IDW) produced during nearshore drilling (GS-series) and monitoring well installation (MW-18, MW-19, and MW-20 series). DEQ further requested that NW Natural inform DEQ of material management decisions prior to removing IDW from the site.

In correspondence dated October 29, 2007 (Mr. Dana Bayuk to Mr. Bob Wyatt), DEQ provided acknowledgement that the October 19, 2007 "*Final Remedial Investigation Workplan, Historical Manufactured Gas Plant Activities, Siltronic Corporation Property*" adequately addressed requirements as described in their September 19, 2007 comment letter and therefore provided approval for implementation.

2.0 Field Work

Offshore transition zone water sampling, seepage meter deployment, and cyanide surface water sampling investigation activities, under the direction of Anchor, commenced on October 1, 2007 and were completed on October 17, 2007.

Surveying of location and elevation of all TarGOST / cone penetrometer boring locations were completed by Chase, Jones, and Associates, Inc. under the direction of HAI on October 10 and 11, 2007.

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 23 gallons of liquids (primarily DNAPL) were recovered in October. Approximately 1,145 gallons of liquids (ranging from an estimated 40 to 80% DNAPL) have been recovered at this location since pumping began in August of 2000.

In response to the June identification of DNAPL within the surficial fill at the MW-13-31 well location, NW Natural discussed and received concurrence from DEQ in a telephone conversation (Ede to Bayuk, July 19, 2007) for initiation of a manual DNAPL removal program at this location – with removal beginning in early August (commenced August 6, 2007). During October, approximately 7.75 gallons of DNAPL were removed from this well location – with approximately 5 to 7 feet of DNAPL present at the base of the well prior to each removal event. As of the end of October, approximately 13 gallons of

DNAPL have been manually removed from MW-13-31 over the course of 11 removal events.

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 August 31, 2009). Sampling of the treatment system effluent was conducted by HAI on October 18, 2007 in conjunction with a City of Portland, Bureau of Environmental Services (BES) sampling event. Results of NW Natural's effluent sampling are provided to BES in monthly Discharge Monitoring Reports. As of October 18, 2007, a total of 2,611,042 gallons of treated water have been discharged to the sanitary sewer since initiation of the permit.

3.0 Anticipated Activities in November and December 2007

Receipt of final laboratory reports related to the June/July 2007 Gasco groundwater monitoring event (Gasco wells and select Siltronic WS-series wells), available in late September through November 2007 timeframe, will undergo data validation during the November through December timeframe.

The next NW Natural/DEQ progress status meeting is presently scheduled to occur on November 28, 2007.

A Final *Stormwater Sampling Plan* for the Gasco Site, revised based on DEQ comments dated August 15, 2007 (Dana Bayuk to Bob Wyatt) and subsequent discussion between Anchor and DEQ, is anticipated to be available for submittal to DEQ in December 2007.

A report describing the June and July 2007 installation of Segment 2 monitoring wells is anticipated to be available for submittal to the DEQ in December 2007.

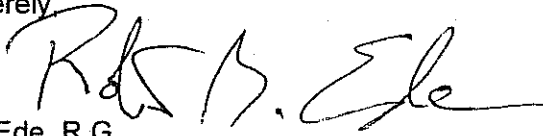
A report describing the August and September 2007 TarGOST DNAPL investigation activities is anticipated to be available for submittal to the DEQ in December 2007.

Investigation activities related to the approved October 19, 2007, *Final Remedial Investigation Work Plan, Historical Manufactured Gas Plant Activities* are anticipated to be initiated in late November or early December 2007, once receipt of access approval from Siltronic – which has been under negotiation much of November is received.

Coordination and planning of a Winter 2007 groundwater monitoring event will be conducted during the December timeframe, with approval of the monitoring plan to be received from DEQ prior to initiating the sampling activities early January.

Should you have any questions, please contact the undersigned.

Sincerely,



Rob Ede, R.G.
Sr. Associate

robe@hahnenv.com

- c: Ms. Sandra Hart, NW Natural
- Mr. Bob Wyatt, NW Natural
- Ms. Patty Dost, Schwabe, Williamson & Wyatt
- Mr. Carl Stivers, Anchor Environmental, L.L.C.
- Mr. John Edwards, Anchor Environmental, L.L.C.
- Mr. Henning Larsen, DEQ NW Region