May 23, 2016 2015-01-323

Mr. Mark Chandler
Vice President of Environmental Services
TOC Holdings Company
2737 W. Commodore Way
Seattle, WA 98199

Subject: **Groundwater Monitoring Report**
First Quarter, 2016
TOC Holdings Co. Facility No. 01-323
301 North Central Ave., Kent, WA

Dear Mr. Chandler:

This report summarizes the results of the First Quarter 2016 groundwater sampling events conducted by HydroCon Environmental, LLC (HydroCon) at the TOC Holdings Co. Facility No. 01-323 property located at 301 North Central Ave., Kent, WA (the Property). The Property location is shown on Figure 1. This report presents a summary of the site background, field activities, and results of the quarterly monitoring event.

Site Background

The current land use of the Property consists of a restaurant with drive-through and parking. Figure 2 illustrates the current site plan as well as the location of the former historical fuel storage and distribution facilities. A gasoline service station that previously occupied the Property operated six underground storage tanks (USTs) and associated product piping and pumps. An interim remedial action to permanently close five of the USTs by removal and offsite disposal, and one of the USTs by closure-in-place was completed in June 2014. Sampling conducted during the interim remedial action confirmed the presence of gasoline-range petroleum hydrocarbon compounds in soil, the extent of which was not fully delineated during the remedial action.

HydroCon conducted an initial site assessment (SI[1]) in June and July 2015 and an additional subsurface investigation (ASI[2]) in late December 2015. Based on the results of field screening and laboratory analysis, diesel-range petroleum hydrocarbons [(DRPH) flagged as potentially representing degraded gasoline-range petroleum hydrocarbons (GRPH)], GRPH, and/or benzene, toluene, ethylbenzene, and total xylene (BTEX)

[1] *HydroCon 2015. Subsurface Investigation Report. TOC Holdings Co. Site 01-323 301 Central Avenue North, Kent, Washington. Prepared for TOC Holdings Co. November 5.*

[2] *HydroCon 2016a. Additional Subsurface Investigation Report. TOC Holding CO. Site 01-323. 301 Central Avenue North, Kent, Washington. Prepared for TOC Holding Co. February 11.*

constituents were observed above MTCA Method A cleanup levels in soil and groundwater samples in the southwest corner of the Site..

Six groundwater monitoring wells were installed and sampled during these investigations The results of groundwater sampling summarized herein indicate that the southeast portion of the Site is impacted with GRPH, DRPH, oil-range petroleum hydrocarbons (ORPH), benzene and lead as indicated by results from MW02, MW03, HC02, HC04, and HC10 through HC13. The elevated lead concentrations in the groundwater samples collected from the temporary borings appear to be an artifact from sediment rich samples produced using the direct push method. Elevated lead concentrations are not observed in samples from developed wells (MW01 and MW02).

A Remedial Investigation/Feasibility Study (RI/FS[3]) completed in March 2016 recommends the installation of a dual-phase extraction system to remediate the site.

Scope Of Work

Groundwater samples were collected on March 2 and 3, 2016 to evaluate the groundwater quality beneath the Site and to eventually demonstrate compliance with MTCA cleanup regulations. The monitoring event included the following activities:

- Measurement of depth to groundwater in monitoring wells MW01 through MW06.
- Collection of groundwater samples from monitoring wells MW01 through MW06.
- Collection and analysis of a field duplicate sample from monitoring wells MW03 for quality assurance/quality control (QA/QC) purposes.
- Summarizing the groundwater sampling activities, analytical results, and upcoming work (this report).

Groundwater Sampling Procedures

HydroCon collected groundwater samples March 2 and 3, 2016 from monitoring wells MW01 through MW06. A field duplicate was collected from MW03 for QA/QC purposes. Monitoring wells were purged and sampled in accordance with U.S. Environmental Protection Agency (EPA) guidance for low-flow sampling[4].

Depth to groundwater was measured in monitoring wells MW01 through MW06 on March 3, 2016. Prior to well purging and sample collection, the well cap on each well was removed and the water level was allowed to equilibrate prior to measuring the depth to water. The depth to water in each well was measured using a

[3] *HydroCon 2016b. Remedial Investigation/Feasibility Study. TOC Holding CO. Site 01-323. 301 Central Avenue North, Kent, Washington. Prepared for TOC Holding Co. March 5.*

[4] *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures (April 1996). EPA/540/S-95/504*

clean electronic water level indicator. Water levels were measured at the scribed reference mark (north side of the top of the polyvinyl chloride casing) at each well.

Prior to groundwater sampling, the wells were purged with a low-flow peristaltic pump equipped with a new length of low-density polyethylene tubing attached to a new length of silicone tubing. The tubing intake was placed approximately 2 to 3 feet below the surface of the groundwater or mid-screen in each well. During purging, water quality was monitored using a Quanta multi-parameter water quality meter equipped with a flow-through cell. The water quality parameters monitored and recorded included temperature, pH, specific conductance, dissolved oxygen, turbidity, and oxidation-reduction potential. Each well was purged until all six water quality parameters stabilized or the minimum parameter subset of pH, specific conductance, temperature, and turbidity and/or dissolved oxygen stabilized. Groundwater sample collection forms are provided in Attachment A.

Following purging, groundwater samples were collected from the pump outlet tubing located upstream of the flow-through cell and placed directly into clean, laboratory-prepared sample containers. Each container was labeled with a unique sample identification number, placed on ice in a cooler, and transported under chain-of-custody to Friedman & Bruya, Inc., of Seattle, Washington, for laboratory analysis.

Purge water generated during the monitoring event was placed in an appropriately labeled 55-gallon steel drum and temporarily stored on the Property pending receipt of analytical data for proper disposal.

Laboratory Analysis

The analytical protocols followed for samples collected at the Property include the required testing for petroleum releases for gasoline (Table 830-1 in the MTCA Cleanup Regulations Chapter 173-340 WAC). The analytical methods used include:

- DRPH and ORPH using Northwest Method NWTPH-Dx
- GRPH using Northwest Method NWTPH-Gx
- Volatile organic compounds including BTEX, ethyl tertiary-butyl ether (MTBE), 1,2-dibromoethane (EDB), 1,2-dichloroethylene (EDC), and naphthalene using EPA Method 8260C
- cPAHs (semi volatile organic compounds) by analyzed by EPA Method 8270D SIM
- Total and dissolved lead using EPA Method 200.8.

All samples were analyzed for DRPH, ORPH, GRPH, BTEX, VOCs, and lead. The sample from MW02 was analyzed for cPAHs.

Groundwater Conditions

Groundwater levels measured on March 3, 2016 ranged from 3.39 feet below the top of monitoring well casing (ft below TOC) in monitoring well MW04 to 4.64 ft below TOC in monitoring well MW01.

Groundwater elevations ranged from 38.15 feet above mean sea level (ft amsl) in MW04 to 38.18 ft amsl in MW06. The groundwater gradient is very shallow across the site. Groundwater flow across the site was generally to the west at an approximate gradient of 0.0003 feet per foot between MW03 and MW06.

Groundwater elevations are shown on Figure 3 and the depth to groundwater and groundwater elevations are summarized in Table 1.

Groundwater Sampling Results

Laboratory analytical results from the monitoring events were compared to applicable MTCA Method A cleanup levels for groundwater and are summarized on Figure 4 and Tables 1 and 2 and summarized below:

- DRPH exceeded MTCA Method A cleanup levels at wells MW03. All DRPH detections were flagged by the laboratory as having chromatographic patterns not resembling the fuel standard used for quantification.
- GRPH exceeded MTCA Method A cleanup levels at wells MW03.
- BTEX, MTBE, EDB, EDC, naphthalene, and lead concentrations did not exceed MCTA Method A cleanup levels.

Data Quality Review

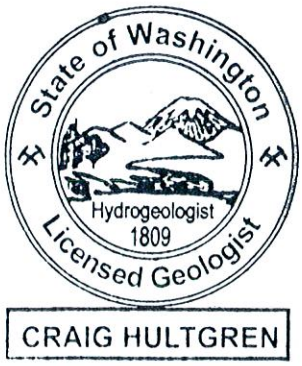
HydroCon performed a QA/QC review of the analytical results, which included a review of accuracy and precision of the data supplied by the laboratory. In addition, the relative percent difference (RPD) calculation was attempted for a blind field duplicate (identified as MW99), collected by HydroCon from monitoring well MW03. The RPD for analytes present above the laboratory reporting limit were within acceptable limits. The RPD cannot be calculated if the results are below the laboratory reporting limit. All other quality control criteria are acceptable for the groundwater samples; therefore, no action is required and analytical results are usable to meet the project objectives. A copy of the laboratory analytical report is provided in Attachment B.

Work Planned

HydroCon prepared a Sampling and Analysis Plan (SAP) for a Tier II Vapor Intrusion (VI) Assessment at the site. Ecology approved the SAP in an email dated April 19, 2016. HydroCon intends to implement the VI SAP in late Spring 2016.

HydroCon will conduct groundwater monitoring at the Property in the Second Quarter 2016, the results of which will be included in a quarterly groundwater monitoring report.

Sincerely,



Craig Hultgren, LHG
Senior Geologist/Project Manager

cc: Mike Warfel, Washington State Department of Ecology, Northwest Region

Figures
Figure 1 – Site Location Map
Figure 2 – Site Features and Utilities
Figure 3 – Groundwater Elevation Contours for March 2016
Figure 4 – Groundwater Analytical Results for March 2016

Tables
Table 1 – Groundwater Analytical Results
Table 2 – Groundwater Semi Volatile Analytical Results

Attachments
Attachment A – Groundwater Sample Collection Forms
Attachment B – Laboratory Report and Chain-of-Custody Documentation