



February 17, 2021

Mr. Herbert M. Meade
Environmental Director
Carroll Motor Fuels
2700 Loch Raven Road
Baltimore, MD 21218

RE: REQUEST FOR CONTINUED MONITORING
Case No. 1993-0197-HA
High's Store No. 34
2906 Churchville Road, Churchville
Harford County, Maryland
Facility I.D. No. 3851

Dear Mr. Meade:

The Maryland Department of the Environment's (MDE) Oil Control Program (OCP) completed a review of the case file for the above-referenced property, including the *Mann Kendall* Analyses, received September 28, 2020; the *Q3 2020 Report of Monitoring Well, Domestic Supply Well Sampling and Request for Reduced Sampling Requirements*, dated October 22, 2020, and the *Q4 2020 Report of Monitoring Well, Domestic Supply Well Sampling*, dated January 12, 2021. The current underground storage tank (UST) system consists of a 20,000-gallon compartmentalized gasohol UST installed in 1999. Currently, five on-site monitoring wells are sampled on a quarterly basis. The subject property and surrounding area are served by private drinking water supply wells. Granular activated carbon (GAC) filtration systems are present on site and at the 2907 Churchville Road property.

This case was opened in 1991 following the detection of benzene and 1,2-dichloroethane (1,2-DCA) in the on-site drinking water supply well. In 2004, a sample collected from the on-site supply well identified the presence of methyl tertiary butyl ether (MTBE) at a concentration of 28 parts per billion (ppb), which exceeds the state action level of 20 ppb. The on-site supply well was last sampled on December 18, 2020. The analytical results for the drinking water well samples collected continued to exhibit concentrations of the following petroleum constituents above MDE's groundwater standards:

- MTBE at a concentration of 595 ppb, which exceeds the 20 ppb groundwater standard;
- 1,2 Dichloroethane (1,2 DCA) at a concentration of 5.05 ppb, which exceeds the 5 ppb groundwater standard;

- Tertiary butyl ether (TBA) at a concentration of 53.9 ppb. TBA does not have an established standard;
- Diisopropyl Ether (DIPE) at a concentration of 9.34 ppb. DIPE does not have an established standard; and
- Tertiary amyl methyl ether (TAME) at a concentration of 22.2 ppb. TAME does not have an established standard.

The most recent monitoring well sampling event was conducted in December 2020. The analytical results for the monitoring well samples collected continued to exhibit concentrations of the following petroleum constituents above MDE's groundwater standards:

- MTBE was detected at 186 parts ppb in MW-7, which exceeds the 20 ppb groundwater standard;
- Total petroleum hydrocarbons – gasoline range organics (TPH-GRO) were detected at 620 ppb and 270 ppb in MW-2 and MW-7, respectively, which exceed the 47 ppb groundwater standard; and
- TBA was detected at 34.3 ppb in MW-7. TBA does not have an established standard.

The *Request for Reduced Sampling Requirements* proposes reduced sampling of the on-site monitoring well network from quarterly to semi-annually and to reduce sampling of the on-site supply well from monthly to quarterly. The 2907 Churchville Road supply well and GAC system is proposed to remain on a quarterly sampling schedule. The Mann-Kendall Analyses of specified petroleum constituents were submitted for monitoring wells MW-2 and MW-7 and tank field monitoring pipes TF-1 and TF-2 as required in MDE's *Request for Additional Information* letter dated September 9, 2020 (copy enclosed). The Mann-Kendall analyses show decreasing or stable trends with the following exceptions. MTBE and TBA are shown to have an increasing trend in MW-7, which is located between the active UST system and the well serving 2907 Churchville Road.


Based on the current commercial land use, documented off-site impacts, and the available information reviewed for the case, OCP partially approves the *Request for Reduced Sampling Requirements*:

- 1) Continue to gauge all wells on a quarterly basis.
- 2) OCP approves the reduction of MW-6, MW-8, TF-1, and TF-2 sampling to a semi-annual frequency (during the second and fourth quarters). Continue sampling MW-1, MW-2, and MW-7 on a quarterly basis unless otherwise stated in writing. All samples collected must be analyzed for full-suite volatile organic compounds (VOCs), including fuel oxygenates and naphthalene, using EPA Method 8260 and total petroleum hydrocarbons - diesel and gasoline range organics (TPH-DRO and TPH-GRO) using EPA Method 8015.
- 3) All groundwater and private drinking water data collected must be submitted in **quarterly reports** detailing the results of the gauging and sampling events no later than 45 days following sample collection.

- 4) When presenting tabulated domestic well sampling data, 1,2 DCA results must be presented, as this constituent remains above the established groundwater standard.

When submitting documentation, provide three hard copies and one electronic copy on a labeled compact disc (CD) or via email. If you have any questions, please contact Ms. Lindley Campbell at 410-537-3387 (lindley.campbell1@maryland.gov) or me at 410-537-3499 (susan.bull@maryland.gov).

Sincerely,



Susan Bull, Eastern Region Supervisor
Remediation Division
Oil Control Program

Enclosure: MDE's *Request for Additional Information* letter dated September 9, 2020

cc: Mr. Greg Beal, Advanced Environmental Concepts, Inc.
Mr. John Resline, Acting Director, Environmental Health Services, Harford County Health Dept.
Mr. Andrew B. Miller, Chief, Remediation Division, Oil Control Program
Mr. Christopher H. Ralston, Program Manager, Oil Control Program