



Maryland

Department of the Environment

Wes Moore, Governor
Aruna Miller, Lt. Governor

Serena McIlwain, Secretary
Suzanne E. Dorsey, Deputy Secretary
Adam Ortiz, Deputy Secretary

July 30, 2025

Mr. Herbert M. Meade
Environmental, Health and Safety Director
Carroll Independent Fuel Company
2700 Loch Raven Road
Baltimore MD 21218

RE: MODIFIED REDUCTION APPROVAL

Case No. 2005-0834-FR
Green Valley Citgo
11791 Fingerboard Road, Monrovia
Frederick County, Maryland
Facility I.D. No. 11836

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 facility, including the *Fourth Quarter 2024 Monitoring Report*, dated February 14, 2025, and the *Annual Remedial Evaluation - 2024*, dated February 15, 2025. On February 14, 2025, your environmental consultant requested modifications to the groundwater sampling requirements and the POET sampling and maintenance requirements as detailed below:

- Reduce the groundwater sampling frequency of the monitoring well network from quarterly to annually under High Risk Groundwater Use Area (HRGUA) monitoring requirements. Monitoring wells MW-1, MW-5, MW-13, and MW-17 are proposed to be maintained as permanent monitoring wells and monitored on an annual frequency under HRGUA;
 - Monitoring wells MW-1 and MW-5 are proposed based on well screen depths,
 - Monitoring well MW-13 is proposed based on screen interval and the downgradient location from the tank field, and
 - Monitoring well MW-17 is proposed based on its downgradient location.
 - The monitoring wells are proposed to be sampled during the late third quarter to early fourth quarter based on historical elevated concentrations of MTBE.
- Reduce the sampling frequency of the Green Valley Plaza supply well from semi-annually to annual ;
- A release from the maintenance requirement for the granular activated carbon (GAC) point-of-entry treatment (POET) system currently installed on the supply well serving 3994 Farm Lane;
- Reduce the submission of groundwater monitoring reports from quarterly to annual contingent on the approval of HRGUA monitoring; and

- A release from the requirement to submit an Annual Remedial Evaluation Report. OCP and the respective homeowners will continue to receive quarterly reports for the residential potable well sampling analytical results.

Monitoring Well Network Sampling

The monitoring well network currently consists of nine monitoring wells (MW-1, MW-4, MW-5, MW-7, MW-13, MW-14D, MW-17, MW-18SR, and MW-18D). The time series groundwater sampling data continues to document a decreasing trend in the concentration of dissolved phase petroleum constituents in the on-site monitoring well network. The most recent sampling data collected in November 2024 reported concentrations of methyl tertiary butyl ether (MTBE) below the state action level of 20 parts per billion (ppb) in all monitoring wells, with the exception of monitoring well MW-18S-R where MTBE was reported at a concentration of 29 ppb. The updated Mann-Kendall statistical analyses of the groundwater data reported a decreasing trend in concentrations of MTBE in monitoring wells MW-7, MW-14D, and MW-17, and MW-18S-R with a confidence factor of greater than 99.9%. The statistical analysis reported no trend for MTBE in MW-18D with a 52.8% confidence factor.

Based on the statistical analyses and dissolved phase groundwater concentrations, OCP has the following comments and select approvals:

1. Based on the presence of MTBE above the groundwater standard in monitoring well MW-18S-R and the absence of a trend in the MTBE concentration in monitoring well MW-18D, OCP denies the request for a complete reduction to annual monitoring. **Beginning in the third quarter 2025**, OCP approves a sampling reduction to **semi-annual** for monitoring wells MW-14D, MW-18D, and MW-18S-R.
2. Continue to submit the sampling results in semi-annual groundwater monitoring reports no later than the 15th day of February and August of each calendar year. OCP and the respective homeowners must continue to receive quarterly reports for the residential potable well sampling analytical results.
3. **Beginning third quarter 2025**, OCP approves the sampling reduction for monitoring wells MW-1, MW-4, MW-5, MW-7, MW-13, and MW-17 to be monitored on an **annual basis**.
 - a. All annual sampling must be completed and reported in accordance with the requirements of the Code of Maryland Regulations (COMAR) 26.10.07.04A.
 - b. If there is a detection of a constituent equal to or greater than a level of concern as defined in COMAR 26.10.07.02D, the requirements of 26.10.07.06 shall be followed.
4. All groundwater samples must be analyzed for full suite volatile organic compounds (VOCs), including fuel oxygenates and naphthalene, using EPA method 8260.
5. Effective immediately, OCP grants the release from the requirement to submit an Annual Remedial Evaluation Report.

GAC POET Sampling and Maintenance

The private supply wells located at 3990 Farm Lane, 3992 Farm Lane, and 3994 Farm Lane are currently monitored on a quarterly basis, and the community supply well located at the Green Valley Plaza is currently monitored on a semi-annual frequency. The private and community supply wells have been monitored since at least 2007. In response to identified levels of methyl tertiary-butyl ether (MTBE) above the MDE's groundwater cleanup standard of 20 parts per billion (ppb), granular activated carbon (GAC), point of entry treatment (POET) systems were required to be installed and maintained. The results of the influent POET samples are summarized below:

- **Green Valley Plaza:** OCP has monitored this public water system since March 2006 and required enhanced monitoring of this system as part of this case. All water samples collected are analyzed for full suite VOCs, and the only constituent of concern is MTBE. Influent sampling results for MTBE between January 2014 and November 2024 have ranged from non-detect to 2.5 ppb. The most recent samples collected in November 2024 reported MTBE at an estimated concentration of 0.25 ppb. Your consultant proposes to reduce the sampling frequency of the Green Valley Plaza well from a semi-annual to annual frequency.
- **3990 Farm Lane:** The potable well has been monitored since May 2007 and sampled as directed by OCP. All water samples collected are analyzed for full suite VOCs, and the only constituent of concern is MTBE. Sampling results for MTBE over the period of October 2020 through August 2024 have ranged from 12 to 34 ppb. The most recent sampling event in August 2024 reported MTBE at a concentration of 13 ppb.
- **3992 Farm Lane:** The potable well has been monitored since May 2007 and sampled as directed by OCP. All water samples collected are analyzed for full suite VOCs, and the only constituent of concern is MTBE. Sampling results for MTBE over the period of November 2020 through November 2022 have ranged from 6.9 to 20 ppb. The most recent sampling event in November 2024 reported MTBE at a concentration of 6.9 ppb.
- **3994 Farm Lane:** The potable well has been monitored since April 2007 as directed by OCP. All water samples collected are analyzed for full suite VOCs, and the only constituent of concern is MTBE. Sampling results for MTBE over the period of November 2022 through November 2024 have ranged from 1.8 to 3.1 ppb. The most recent sampling event in November 2024 reported MTBE at a concentration of 1.8 ppb. MTBE concentrations have remained less than 5 ppb since November 2021.

The referenced sampling results for all four properties indicate sustained MTBE concentrations below the State action level of 20 ppb. Based on the current analytical data, OCP has the following requirements:

1. During the **third quarter 2025**, OCP requires one final sampling collection at 3994 Farm Lane to support the request to discontinue sampling of the private drinking water well. Following a review of the final sampling results, OCP will complete a final review of your request to

discontinue sampling at 3994 Farm Lane. OCP will provide notice to the property owner under separate cover.

2. **Beginning third quarter 2025**, OCP approves the reduction in sampling frequency of the Green Valley Plaza from semi-annual to **annual**. All supply well water samples must be analyzed for full-suite VOCs, including fuel oxygenates and naphthalene, using EPA Method 524.2.
3. Continue **quarterly** sampling of the GAC protected supply wells at 3990 and 3392 Farm Lane. Continue to provide the analytical reports to OCP and the respective homeowners, documenting the well water sampling analytical results.
4. Continue to include the analytical results of the Green Valley Plaza and off-site drinking water supply well sampling with the semi-annual groundwater monitoring reports

This *Reduction Approval* letter is not a waiver or limitation of MDE's right to take enforcement or other action in the future based upon contamination at and around the site. The MDE and the State of Maryland retain all authority and rights to seek all available relief, including equitable relief and damages of any nature, such as compensatory and natural resource damages, for contamination at and around the site

If you have any questions, please contact the case manager, Mr. Christopher King at 410-537-4152 or (christopherj.king@maryland.gov) or me at 410-537-3337 or (jim.richmond@ maryland.gov).

Sincerely,



Susan R. Bull, Chief
Remediation Division
Oil Control Program

cc: Mr. and Mrs. Samir and Jenifer Andrawos, Green Valley Plaza Shopping Center
Mr. Peter Reichardt, Sr. Project Manager, Groundwater and Environmental Services, Inc.
Mr. Barry Glotfelty, Director of Env. Health, Frederick County Health Department
Julie Kuspa, Deputy Principal Counsel, Office of the Attorney General
Mr. Robert Peoples, Water Supply Program, Water & Science Administration
Mr. Chris Watling, Water Supply Program, Water & Science Administration
Mr. Christopher King, Case Manager, Remediation Division, Oil Control Program
Mr. Jim Richmond, Supervisor, Remediation Division, Oil Control Program
Mr. Christopher H. Ralston, Program Manager, Oil Control Program