



Maryland

Department of
the Environment

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary
Horacio Tablada, Deputy Secretary

October 4, 2019

Ms. Annette Dokken
Program Manager
Motiva Enterprises, LLC
7765 Lake Worth Road, #319
Lake Worth, Florida 33467

RE: WORK PLAN REVISION APPROVAL
Case No. 2003-0695-MO
Former Shell Station No. 137675
15541 New Hampshire Avenue, Silver Spring
Montgomery County, Maryland
Facility I.D. No. 11245

Dear Ms. Dokken:

The Maryland Department of the Environment's (MDE) Oil Control Program (OCP) completed a review of the case file for the above-referenced active gasoline station/groundwater investigation, including the *Work Plan Revision*, dated Dec. 2018, and the *Quarterly Status Report - First Quarter 2019*, dated Apr. 2019. The groundwater monitoring/recovery well network includes 42 monitoring wells, 9 recovery wells, and 7 former drinking water supply wells. The off-site remediation system remains operational and has treated more than 23 million gallons of groundwater. The Mann-Kendall analysis of the time series sampling data demonstrates a statistical decrease in the concentrations of dissolved phase petroleum constituents in groundwater.

In response to the decreasing trend of the groundwater data and after evaluating the horizontal and vertical extent of the dissolved phase petroleum contaminants, your environmental consultant proposes several amendments to the *Corrective Action Plan (CAP)* including modifying the number of extraction wells utilized by the off-site groundwater remediation system, changing the sampling frequency of certain monitoring wells, and modifying the analytes required as part of groundwater sampling activities. The modifications are further defined as follows:

1. The off-site remediation system currently extracts groundwater from recovery wells RW-19A, RW-20, RW-21, and RW-27 on a continuous basis and additional recovery wells RW-22 and RW-23 on a monthly pulsed schedule. While the off-site remediation system will remain in operation, the proposed change is to begin the continuous recovery of groundwater from RW-20, RW-21, and RW-23 and to discontinue the recovery of groundwater from RW-19A, RW-22, and RW-27.

2. Twice per month, water samples are collected (*pre-, mid-, and post-filtration*) from the off-site remediation system to evaluate system operation and to identify any maintenance required. The proposed change is to modify the sampling frequency to a monthly basis. All groundwater samples collected will be analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX), naphthalene, methyl tertiary-butyl ether (MTBE), and total petroleum hydrocarbons - diesel and gasoline range organics (TPH-DRO and TPH-GRO).
3. On a monthly basis, groundwater samples are collected from recovery wells RW-19A, RW-20, RW-21, RW-22, RW-23, and RW27 and monitoring wells 730 BND and 730 BNS to monitor groundwater conditions in close proximity to the off-site remediation system. The proposed change is to remove the requirement to analyze these samples for full-suite volatile organic compounds (VOCs). All samples will continue to be analyzed for BTEX, MTBE, and fuel oxygenates. If MDE approves the continuous recovery of groundwater from wells RW-20, 21 and 23 (Item 1), the referenced wells in Item 3 will be sampled on a monthly basis for an initial 6-month period. The 6-month sampling data will be reviewed and a separate report evaluating the time series sampling data will be submitted for MDE's review. The report will include recommendations for future off-site system operation and sampling frequencies.
4. Groundwater samples are collected from the entire monitoring well network during the second and fourth quarters of each calendar year. During the first and third quarters, the sampling activities are modified and include the sampling of 17 monitoring wells, 9 recovery wells, and 7 former drinking water supply wells along Bryants Nursery Road. The proposed change is to collect groundwater samples on a quarterly basis (every three months) from a reduced number of monitoring wells including: MW-8D; MW-16D; MW-16S; MW-18; MW-26D; MW-26S; 710 BNR; 711 BNR; 720 BNR; 721 BND; 721 BNR; 730 BNR; 740 BNR; 750 BND; and 750 BNR. All samples will be analyzed for BTEX, MTBE, and fuel oxygenates.
5. In addition to the wells referenced in Item 4 above, annual (every 12 months) groundwater samples are proposed to be collected from monitoring wells: MW-5S; MW-6D; MW-6R; MW-6S; MW-7D; MW-7S; MW-8S; RW-10; MW-12; MW-13D; MW-13S; MW-14D; MW-15D; MW-17D; MW-17S; MW-17W; 721 BNS; 730 BNS; and 750 BNS. All samples will be analyzed for BTEX, MTBE, and fuel oxygenates.
6. On a quarterly frequency, groundwater samples are collected from 14 private drinking water supply wells located along Bryants Nursery Road. The proposal is to reduce the number of private supply wells sampled quarterly to 650, 700, and 701 Bryants Nursery Road). All samples will be analyzed for BTEX, MTBE, and fuel oxygenates. The remaining 11 drinking water supply wells will be sampled on an annual basis.
7. The *Work Plan Revision* proposes to complete annual sampling of those monitoring wells that are not impacted or are located outside the contaminant plume. After two annual sampling events, those wells that remain non-detect or below the state action level for MTBE will be decommissioned.

Based on our review of the information provided, MDE hereby approves the *CAP* amendments proposed in the *Work Plan Revision* contingent upon the following modifications:

Item 2:

All samples must be analyzed for BTEX, MTBE/fuel oxygenates using EPA Method 8260 and TPH-DRO and TPH-GRO using EPA Method 8015.

Item 3:

Monthly sampling of the referenced wells (RW-19A, RW-20, RW-21, RW-22, RW-23, RW27, 730 BND, and 730 BNS) will continue for an initial six-month period. The MDE requires the inclusion of monitoring well MW-8D in the monthly sampling activities. All samples must be analyzed for BTEX, MTBE, and fuel oxygenates. No later than 15 days following their receipt, provide the OCP case manager, Mr. Jim Richmond, with a table that summarizes the monthly groundwater analytical results as compared to the prior year of data for the referenced wells. The MDE requires submittal of the groundwater sampling report, including the laboratory analytical data, no later than 45 days following completion of the initial six-month sampling period. The OCP may require modifications to the groundwater treatment system/pumping wells should a significant increase in contaminant concentrations occur.

Item 4:

The MDE concurs with quarterly sampling of wells MW-8D, MW-16D, MW-16S, MW-18, MW-26D, MW-26S, 710 BNR, 711 BNR, 720 BNR, 721 BND, 721 BNR, 730 BNR, 740 BNR, 750 BND, and 750 BNR. The MDE also requires the inclusion of monitoring wells 6D, 9D, 14D, 15D, 17S, and RW3 in the quarterly sampling activities. All samples must be analyzed for BTEX, MTBE, and fuel oxygenates.

Item 6:

The MDE understands the respective property owners at 650, 660, 670, and 700 Bryants Nursery Road have denied Motiva/Sovereign access to allow for sampling of their private drinking water supply wells. Continue to collect samples from the remaining 10 off-site drinking water supply wells on a semi-annual basis (every six months). All groundwater samples must be collected prior to any treatment system that may exist (water softener, etc.) - pending approval of the homeowner. All samples collected from the off-site drinking water supply wells must be analyzed for full-suite VOCs, including fuel oxygenates and naphthalene, using EPA Method 524.2.

Item 7:

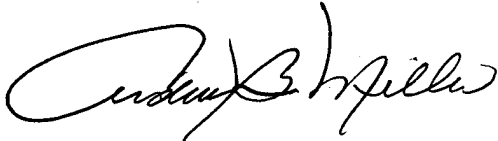
The MDE requires the collection of groundwater samples from the entire monitoring well network during the fourth quarter of each calendar year until otherwise amended.

Additional:

Document any attempts to locate monitoring well MW9S. If the monitoring well is compromised, properly abandon 9S in accordance with Code of Maryland Regulations (COMAR) 26.04.04.34 through .36; otherwise, continue to collect groundwater samples from 9S on a quarterly basis.

Notify the OCP at least five working days prior to conducting any work at this site so we have an opportunity to observe field activities. If you have any questions, please contact Mr. Jim Richmond at 410-537-3337 or jim.richmond@maryland.gov.

Sincerely



Andrew B. Miller, Chief,
Remediation and State-Lead Division
Oil Control Program

cc: Mr. James Draper, Resident Agent
Ms. Natalie Percello, Sovereign Consulting, Inc.
Mr. Steve Martin, Montgomery County Department of Environmental Protection
Mr. Jim Richmond, Case Manager, Remediation and State-Lead Division, Oil Control Program
Mr. Christopher H. Ralston, Program Manager, Oil Control Program
Ms. Kaley Laleker, Director, Land and Materials Administration