



# Maryland

Department of  
the Environment

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

Ben Grumbles, Secretary  
Horacio Tablada, Deputy Secretary

August 28, 2019

Mr. Steve Stookey  
Southern Maryland Oil, Inc.  
P.O. Box 2810  
La Plata, Maryland 20646

**RE: REQUEST FOR CONTINUED MONITORING**

**Case No. 2013-0321-AA**  
**Ft. Meade Shell No. 550**  
**2631 Annapolis Road, Hanover**  
**Anne Arundel County, Maryland**  
**Facility I.D. No. 4591**

Dear Mr. Stookey:

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 *Second Quarter 2019 Status Report*, dated July 5, 2019. This case was opened in Nov. 2012 when the OCP received notification that a 10,000-gallon gasoline underground storage tank (UST) failed tightness testing, which indicated a possible release. The UST was emptied and removed from service on Nov. 28, 2012. In Dec. 2012, samples collected from 2 existing monitoring wells revealed benzene at 2,900 parts per billion (ppb) and methyl tertiary-butyl ether (MTBE) at 61 ppb in a monitoring well adjacent to the active UST system.

A review of the OCP's records revealed that the current "in use" storage system is comprised of 3 second-generation single-wall, fiberglass-reinforced plastic USTs, installed in Jan. 1983: 2 10,000-gallon gasohol and a 10,000-gallon diesel. SMO communicated to the OCP that this station is scheduled for upgrades within the next few years. There are currently 12 monitoring wells and 4 tank field monitoring pipes on site. The station is located in a mixed commercial/residential community served by private drinking water supply wells.

The presence of liquid phase hydrocarbons (LPH) was first detected on Aug. 9, 2013 in monitoring wells MW-7 and MW-9. Recovery in the form of periodic enhanced fluid recovery (EFR) events was conducted between Oct. 2013 and Jan. 2018 in MW-7 and MW-9. As of second quarter 2019, a total of 13,767.5 gallons of petroleum-impacted water has been recovered from MW-7 and MW-9, an estimated 316 gallons of which was LPH. On Nov. 14, 2013, a small thickness of LPH was observed in MW-14. LPH recovery in MW-14 was conducted via hand bailing, with an estimated 4.8 gallons of LPH recovered. LPH were last observed in MW-7 and MW-9 on Mar. 27, 2017 and the last EFR event was conducted on Jan. 15, 2018. A review of the corrected groundwater elevations collected between Mar. 27, 2017 and June 11, 2019 revealed that the groundwater table has increased approximately 1 foot in MW-7 and approximately 4 feet in MW-9.

The monitoring well network was most recently sampled in June 2019. The groundwater samples were 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 GRO) using EPA Method 8015. The following analytical results exhibited concentrations of petroleum constituents above MDE's groundwater standards:

- Benzene at concentrations ranging from 5.1 to 885 ppb, which exceed the 5 ppb standard
- Toluene in MW-12 at a concentration of 1,300 ppb, which exceeds the 1,000 ppb standard
- Ethylbenzene in MW-15 at a concentration of 1,230 ppb, which exceeds the 700 ppb standard

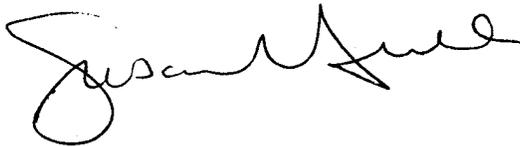
Based on the location of this station in an area served by private drinking water supply wells and the increased water levels since LPH were last detected, MDE requires the following:

1. Continue quarterly (every 3 months) gauging and sampling of the monitoring well network. All samples collected must be analyzed for full-suite VOCs, including fuel oxygenates, ethanol, and naphthalene, using EPA Method 8260 and TPH-GRO using EPA Method 8015.
2. The on-site drinking water supply well and the car wash wells were last sampled on Sept. 8, 2014. During the 4th Quarter 2019 sampling event, collect samples from each of these supply wells. All samples collected must be analyzed for full-suite VOCs, including fuel oxygenates, ethanol, and naphthalene, using EPA Method 524.2.
3. Additional area supply wells (KinderCare, Ridgeview 1, and Ridgeview 2) were last sampled in June 2013 and Jan. 2014, respectfully, as part of the historic investigation. During the 4th quarter 2019 sampling event, collect samples from each of these wells. All samples collected must be analyzed for full-suite VOCs, including fuel oxygenates, ethanol, and naphthalene, using EPA Method 524.2.
4. **No later than 45 days following a sampling event**, submit a *Report* detailing the results of the quarterly sampling event. When submitting sampling reports, include detailed data summary tables and scaled site maps showing actual sampling locations. Reports must include groundwater surface contours and dissolved phase concentration maps including benzene, ethylbenzene, toluene, xylene, and MTBE concentrations. To enhance the OCP's review of the data, present calculated Mann Kendall analysis for each well.
5. **Included in the 4th Quarter 2019 Status Report**, a well survey identifying all drinking water supply wells (i.e., domestic, non-community/community water supply, agricultural) within a half-mile radius of the subject property and plot on a U.S. Geological Survey map or scaled street map.
  - a. Annotate on this map the 500-ft., 1,000-ft., and 0.5-mile radii.
  - b. Provide a summary table including, at a minimum, property address, property owner name, property owner address, depth of well, casing depth, screen depth, and current status of well usage.
  - c. Review well completion reports and evaluate whether on-site conditions could potentially impact any off-site drinking water supply wells in the area.

- d. Submit documentation of which supply wells are historic and have been abandoned.
  - e. For properties that are served with public water, provide confirmation of this connection in the summary table (this can include confirmation from Anne Arundel County Water and Sewer Authority of properties that receive a water bill).
  - f. Submit copies of field notes documenting field reconnaissance performed to verify presence or absence of wells.
  - g. Provide written documentation of your findings and the list of persons contacted.
6. Based on the pending removal and upgrade scheduled at this facility, the OCP does not anticipate closing this case until a full UST closure assessment has been completed.

If you have any questions, please contact Ms. Lindley Campbell at 410-537-3387 ([lindley.campbell1@maryland.gov](mailto:lindley.campbell1@maryland.gov)) or me at 410-537-3499 ([susan.bull@maryland.gov](mailto:susan.bull@maryland.gov)).

Sincerely,



Susan R. Bull, Eastern Region Supervisor  
Remediation and State-Lead Division  
Oil Control Program

cc: Mr. Doug Hamilton, ARM Group, Inc.  
Mr. Don Curtian, Director, Environmental Health, Anne Arundel County Health Department  
Ms. Ginger D. Klingelhofer-Ellis, Anne Arundel County DPW  
Ms. Lindley Campbell, Case Manager, Remediation and State Lead Division, Oil Control Program  
Mr. Andrew Miller, Chief, 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