



Maryland
Department of
the Environment

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

Ben Crumbles, Secretary
Horacio Tablada, Deputy Secretary

February 15, 2019

Mr. David Went
Global Partners, LP
Alliance Energy Gasoline Division
800 South Street, Suite 500
P.O. Box 549290
Waltham MA 02454

Ms. Florence Rosen
Rosen Associates Management Corporation
33 South Jericho Road
Jericho NY 11753

RE: MODIFICATION TO SAMPLING FREQUENCY AND REQUEST FOR WORK PLAN
Case No. 2011-0112-HA
Bel Air Xtramart No. 7805
2476 East Churchville Road, Bel Air
Harford County, Maryland
Facility I.D. No. 12391

Dear Mr. Went and Ms. Rosen:

The Maryland Department of the Environment's (the Department) Oil Control Program (OCP) recently completed a review of the case file for the above-referenced property, including the *Site Status Report: Fourth Quarter 2018*, dated January 5, 2019. A *Settlement Agreement and Consent Order* was executed for this site on October 11, 2016. Between November and December 2016, all fueling operations at this facility ceased with the removal of five underground storage tanks (USTs), all associated dispensers and piping, and 1,338.62 tons of petroleum-impacted soil.

In accordance with Paragraph B(9) of the *Settlement Agreement and Consent Order*, the network of 14 monitoring and recovery wells has been gauged and sampled on a quarterly basis. The monitoring well network was most recently sampled in November 2018. 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 TPH-GRO) using EPA Method 8015. The November 2018 analytical results exhibit elevated concentrations of petroleum constituents in predominately four monitoring wells (MW-7R, MW-14, MW-16S, and MW-16I) at levels above the Department's groundwater standards:

- Benzene ranging from 6.9 to 33.5 parts per billion (ppb), which is above the 5 ppb standard;
- Ethylbenzene at 1,740 ppb in MW-7R, which is above the 700 ppb standard;
- MTBE ranging from 88.6 to 4,330 ppb, which is above the 20 ppb standard;
- TPH-GRO ranging from 114 to 21,500 ppb, which is above the 47 ppb standard; and
- TPH-DRO ranging from 53 to 4,860 ppb, which is above the 47 ppb standard.

In a letter dated March 7, 2018, the OCP approved a modification to the required sampling program. The modification included: the discontinuation of monitoring for metals in the monitoring wells and private drinking water supply wells; the discontinuation of sampling of specified off-site private drinking water supply wells; and a reduction in the sampling frequency of specific on-site monitoring wells.

Based on the current data provided, a continued trend of elevated petroleum constituents persists in the area encompassed by MW-7R to the drinking water well serving 1 Meadow Springs Drive. Elevated levels of TPH-DRO have extended as far down gradient as the MW-17 monitoring well series (MW-17S, MW-17I, and MW-17D) suggesting that a preferential migratory pathway for petroleum contamination in the subsurface exists. Although the November 2018 data collected from the MW-17 well series reported results below method detection limits, groundwater elevation levels have increased almost 4 feet in the MW-17S and 17I wells and almost 12 feet in the MW-17D well since the March 2018 sampling event due to the historic high levels of precipitation.

The contamination trend was first identified in the *Request for Granular Activated Carbon (GAC) Installation and Additional Activities* directive letter issued by the OCP on August 14, 2012 (copy enclosed). In the letter, the OCP required investigation of the subsurface bedrock conditions in the area between the former underground storage tanks and the La Tolteca restaurant. To date this investigation has not been completed. This data is deemed to still be critical in evaluating and monitoring the contaminant plume.

Based upon the existing migratory pathways and the continued elevated levels of petroleum constituents detected in the area down gradient of the former underground storage tanks, the Department requires the following:

1. Increasing the monitoring frequency of the MW-17(S, I, and D) well series to semi-annual. Samples must be collected in the second and fourth quarters of the monitoring year. All samples collected must be analyzed for full-suite VOCs, including fuel oxygenates and naphthalene, using EPA Method 8260 and TPH-DRO and GRO using EPA Method 8015.
2. Based upon the location of the MW-17 well series on the 2303 Churchville Road property, reinstate the monitoring requirements for the drinking water well servicing this property. The well must be sampled on a semi-annual basis. Samples must be collected in the second and fourth quarters of the monitoring year. All samples must be analyzed for full-suite VOCs using EPA Method 524.2. Copies of the sampling results must be provided to the property owner, the OCP case manager, and the Harford County Health Department.
3. **No later than March 29, 2019**, submit a *Work Plan* to assess the horizontal and vertical extent of petroleum contamination in the area between the former underground storage tanks (MW-14) and the MW-17 series. This *Work Plan* must include the installation of multi level shallow, mid and deep bedrock wells to a depth of at least 200 feet below grade and a plan for borehole geophysics within the bedrock wells.
4. Continue to submit groundwater monitoring reports as required by the *Settlement Agreement and Consent Order*. Continue to evaluate and discuss the data obtained as part of the *Post-removal Monitoring Plan*.

Mr. David Went and Ms. Florence Rosen
Case Nos. 2011-0112-HA
Page 3

If you have any questions, please contact me at 410-537-3499 or by email at: susan.bull@maryland.gov.

Sincerely,

A handwritten signature in cursive script, appearing to read "Susan R. Bull".

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

SRB/nln

Enclosure: August 14, 2012 *Request for Granular Activated Carbon (GAC) Installation and Additional Activities*

cc: Ms. Andrea Taylorson-Collins (Groundwater & Environmental Services, Inc.)
Stephanie Cobb-Williams, Esquire (Office of the Attorney General)
Mrs. Julie Mackert (Director, Bureau of Environmental Health, Harford County Health Department)
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)



MARYLAND DEPARTMENT OF THE ENVIRONMENT

Oil Control Program, Suite 620, 1800 Washington Blvd., Baltimore MD 21230-1719

410-537-3442 • 410-537-3092 (fax)

1-800-633-6101

Martin O'Malley
Governor

Robert M. Summers, Ph.D.
Secretary

Anthony G. Brown
Lieutenant Governor

August 14, 2012

Mr. Jeff Walker, Esquire
Warren Equities
27 Warren Way
Providence RI 02905

**RE: REQUEST FOR GRANULAR ACTIVATED CARBON (GAC)
INSTALLATION AND ADDITIONAL ACTIVITIES**

Case Nos. 2013-0007-HA and 2011-0112-HA

(Closed Case No. 1989-0972-HA)

Notice of Non-Compliance NNC-OCP-2011-020

Bel Air Xtra-Mart No. 7805

2476 East Churchville Road, Bel Air

Harford County, Maryland

Facility I.D. No. 12391

Dear Mr. Walker:

The Oil Control Program recently completed a review of the case files for the above-referenced property. Between April 2005 and September 2008, a network of twelve monitoring wells and four former recovery wells was sampled by Drake Petroleum Company. Currently, thirteen monitoring/recovery wells remain in the monitoring well network (eleven on-site and a cluster well pair off-site). Sampling of the monitoring well network in June 2012 detected benzene at 1,420 parts per billion (ppb); toluene at 10,500 ppb; ethylbenzene at 3,010 ppb; xylene at 13,200 ppb; and methyl tertiary-butyl ether (MTBE) at 65,800 ppb. Although the facility is served by municipal water, there are private drinking water supply wells adjacent to the property. Implementation of a *Corrective Action Plan* for the installation of a high-vacuum VEGE system in the area of MW-10 and MW-12 and a SVE system on the tank field (TF-1) is currently on-going.

In June 2012, a representative of the Harford County Health Department collected a drinking water sample from the residence located at 1 Meadow Springs Drive in response to a complaint of odors in the well. The sample collected revealed benzene at 17.91 ppb and MTBE at 251.86 ppb (results enclosed). A confirmatory sample collected in July 2012 revealed benzene at 15.65 ppb and MTBE at 340.98 ppb (results enclosed). The Harford County Health Department also collected a drinking water sample from 3 Meadow Springs Drive; this sample was non-detect for petroleum constituents (results enclosed).

Since benzene and MTBE have been detected above regulatory levels in the supply well serving 1 Meadow Springs Drive, the Department conducted research into possible sources for the contamination. Currently, the only registered underground storage tanks (USTs) in the immediate vicinity are located at 2476 Churchville Road and 2300 Churchville Road. No registered USTs were identified in the Department's database for 1 Meadow Springs Drive. Based on the aforementioned findings, the Department hereby requires the following:

Request for GAC Filtration System and Monitoring:

- 1) **No later than August 30, 2012**, install and maintain a granular activated carbon (GAC) filtration system on the private drinking water supply well located at 1 Meadow Springs Drive (see enclosed fact sheet).
- 2) **No later than September 15, 2012**, collect samples from the newly installed GAC system. Samples must be collected pre-, mid-, and post-filtration. All samples collected must be analyzed for full-suite volatile organic compounds (VOCs), including fuel oxygenates, using EPA Method 524.2. Please submit copies of all sampling results to the property owner, the Harford County Health Department, and the Oil Control Program.
- 3) **No later than October 15, 2012** and on a **monthly** basis thereafter for three months, collect samples from the GAC system (pre-, mid-, and post-filtration) and analyze for full-suite VOCs, including fuel oxygenates, using EPA Method 524.2. Please submit copies of all sampling results to the property owner, the Harford County Health Department, and the Oil Control Program. The Oil Control Program will evaluate these sampling results and determine an appropriate future sampling frequency for the GAC system.

Request for Off-Site Sampling:

- 4) **No later than August 30, 2012**, sample the following addresses to ensure that petroleum contamination has not migrated off-site and impacted these sensitive receptors: 5 Meadow Springs Drive and 2303 Churchville Road (Grace Assembly of God). These drinking water well samples must be analyzed for full-suite VOCs, including fuel oxygenates, using EPA Method 524.2. If a GAC filtration system is present, samples must be collected pre-filtration.
- 5) To avoid any confusion with area residents receiving Drake Petroleum Company's written request for *Water Well Sampling Access*, provide a copy of the proposed letter that will be sent to all property owners earmarked for the sampling program. This *Water Well Sampling Access* letter must be reviewed and approved by the Department prior to mailing. Upon approval of a *Water Well Sampling Access* letter, schedule and conduct initial sampling of the potable wells located at the addresses referenced above. After the sampling results have been obtained, provide a copy to each homeowner sampled, the Harford County Health Department, and the Oil Control Program.

Bedrock Well Installation:

- 6) **No later than August 30, 2012**, submit a *Supplemental Subsurface Investigation Work Plan* for the installation of two additional bedrock well/shallow monitoring well pairs in order to further investigate subsurface conditions in the area. One well pair must be installed along Churchville Road in front of the property at 1 Meadow Springs Drive; the other well pair must be installed along the other side of Churchville Road in front of the La Tolteca Restaurant property at 2350 Churchville Road.
- The bedrock wells must be installed to a depth of at least 200 feet below grade. The *Work Plan* must include a plan for borehole geophysics in the bedrock wells.
 - It will be the responsibility of Drake Petroleum Company and their environmental consultant to secure the necessary property access.

Responsibility for the GAC Filtration System:

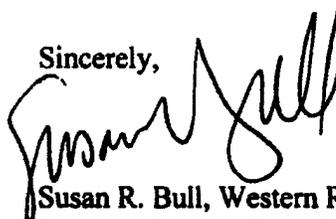
Please note that if Drake Petroleum Company fails to complete installation of the GAC filtration system by **August 30, 2012**, the Department will assume control of mitigating impact to this off-site private well. The MDE has determined that environmental conditions at 1 Meadow Springs Drive warrant the installation, future sampling, and proper maintenance and operation of a GAC filtration system. Under Section §4-405(c) of the Environment Article, Annotated Code of Maryland, the Department shall assume control of any discharge or spill situation when it determines that the responsible party is not acting promptly to remove the spill or is not undertaking removal or mitigation in a manner appropriate to control or rectify the conditions constituting the emergency or hazard involved.

Cost Recovery:

Pursuant to Sections 4-408 and §411(f) of the Environment Article, Annotated Code of Maryland, the cost of labor, equipment, operation, materials, and any other costs incurred in containment, cleanup, removal, and restoration work resulting from the discharge of oil, petroleum products and their by-products shall be reimbursed to the State by the person responsible for the discharge. As a potential responsible party (PRP), as defined under COMAR 26.10.02, Drake Petroleum Company may be subject to legal sanctions by the Department for assuming the cost of installing the GAC filtration systems.

If you have any questions, please contact the case manager, Ms. Jeannette DeBartolomeo, at 410-537-3427 (email: jdebartolomeo@mde.state.md.us) or me at 410-537-3499 (email: sbull@mde.state.md.us).

Sincerely,



Susan R. Bull, Western Region Section Head
Remediation and State-Lead Division
Oil Control Program

Mr. Jeff Walker

Case No. 2012-0112-HA

Page Four

JD/nln

Enclosures: Sampling Results 1 Meadow Springs Drive (06/22/12)
Sampling Results 1 Meadow Springs Drive (07/06/12)
Sampling Results 3 Meadow Springs Drive (07/10/12)
GAC Filtration System Fact Sheet

cc: Mr. Michael Axelsson (1 Meadow Springs Drive)
Ms. Krystin Porcella (1 Meadow Springs Drive)
Ms. Janet Tilley (5 Meadow Springs Drive)
Grace Assembly of God (2303 East Churchville Road)
Ms. Andrea Taylorson-Collins (Groundwater and Environmental Services, Inc.)
Ms. Florence Rosen (Rosen Associates Management Corp.)
Mr. Peter Smith (Harford County Health Dept.)
Mr. Andrew B. Miller
Mr. Christopher H. Ralston
Mr. Horacio Tablada