



Maryland

Department of the Environment

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

Ben Grumbles, Secretary
Horacio Tablada, Deputy Secretary

May 15, 2018

Mr. Stanley Carpenter
Colonial Pipeline Company
1089 Kings Highway
West Deptford NJ 08086

RE: REQUEST FOR ADDITIONAL MONITORING AND HALF-MILE WELL SURVEY
Case No. 2018-0459-HA
Colonial Pipeline – Bel Air Station
2942 Charles Street, Fallston
Harford County, Maryland

Dear Mr. Carpenter:

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, located in a designated high-risk groundwater use area. On March 7, 2018, Colonial Pipeline Company (Colonial) reported that a release of diesel fuel occurred at the site. The release was discovered within the pumping loop observation portals during a scheduled site monitoring visit. An environmental spill response company was hired and the recovery of liquid phase hydrocarbons (LPH) and petroleum impacted soils and water began March 7, 2018. Investigation of the release revealed two corrosion perforations on the 20-inch diameter kick back line, approximately 16 inches from the top line of the pipe. The perforations were repaired and the line was returned to service on March 8th.

On March 12, 2018, an emergency subsurface investigation was initiated to characterize the extent of petroleum impacts at the site. A total of 28 soil borings were advanced (17 hand-augured and 11 direct-push soil borings) in and around the confines of the subsurface structures. Six permanent groundwater monitoring wells were installed around the perimeter of the site. On April 13, 2018, the Department received notification that petroleum-related compounds were detected in the groundwater sample collected from monitoring well MW-2. The analytical results reported a detection of benzene at a concentration of 11 parts per billion (ppb), which exceeds the benzene regulatory standard of 5 ppb. Sampling results from the other five monitoring wells were non-detect for petroleum constituents. A confirmatory sample was collected from MW-2 on April 16, 2018, and the results confirmed the presence of benzene at a concentration of 59 ppb. The on-site drinking water supply well was sampled on March 12, 2018. The supply well analytical results did not detect any petroleum related impacts above laboratory detection limits.

On March 16, 2018, an environmental contractor collected samples from 11 drinking water supply wells located on ten properties immediately adjacent to the Colonial pumping station. Personnel from the OCP and the Harford County Health Department oversaw the collection of these drinking water samples. The analytical results of the samples collected from these drinking water supply wells did not reveal any petroleum related impacts above laboratory detection limits.

The Department understands that the pipeline is protected from corrosion by an outer coating. Time and exposure to fuel can degrade that coating. During the initial emergency response, the main pipelines passing through the Bel Air Pumping Station and the pipes within the kick back line were exposed to recover LPH and petroleum impacted soils. While the pipeline was exposed, the Department understands that compromises were detected in the coating where LPH was recovered. Upon completing the initial recovery efforts, the Department understands that you have begun repairing any coating compromises and inspecting the rest of the buried structures at the site. During this process, additional soils have been excavated and will be sent to a State of Maryland approved soil disposal facility.

Since this property is located in a high-risk groundwater use area served by a drinking water supply well, the Department requires completion of the following:

- 1) **No later than May 28, 2018**, submit 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. Submit copies of field notes documenting field reconnaissance performed to verify the presence or absence of wells.
 - f. Provide written documentation of your findings and the list of persons contacted.
- 2) **No later than May 28, 2018**, submit the *Subsurface Investigation Report*. The *Subsurface Investigation Report* should include, at a minimum: a detailed accounting of the release and the steps of the post-release investigation and recovery process; data summary tables (including fuel oxygenates and naphthalene) and scaled site maps showing actual sampling locations (i.e., soil boring/monitoring well locations); any dissolved and liquid phase hydrocarbon thicknesses encountered should also be depicted on maps encountered. Qualitative and/or quantitative discussions should be presented, including recommendations for further actions (additional characterization or remedial options)
- 3) **Begin monthly gauging and quarterly (every three months) sampling of the monitoring well network until written approval from the Department is received to suspend or reduce the sampling frequency.** Sampling events must be conducted in July, October, January, and April. 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 GRO) using EPA Method 8015.
- 4) **Conduct quarterly sampling of the on-site drinking water supply well.** Sampling events must be conducted in July, October, January, and April. All samples collected must be analyzed for full-suite VOCs, including fuel oxygenates and naphthalene, using EPA Method 524.2. If a granular activated carbon (GAC) filtration system is present, samples must be collected pre-, mid-, and post-filtration.
- 5) **Conduct quarterly sampling of the drinking water supply wells of the ten immediately adjacent properties until written approval to reduce or suspend sampling is received from the Department.** These properties include: 2929, 2931, 2932, 2933, 2935, 2936, and 3006 Charles Street and 2220, 2226 (2 wells), and 2230

Rutledge Road. Sampling events must be conducted in July, October, January, and April. All samples must be collected as close to the pressure tank as possible. All samples collected must be analyzed for full-suite VOCs, including fuel oxygenates and naphthalene, using EPA Method 524.2. If a GAC filtration system is present, samples must be collected pre-, mid-, and post-filtration. Copies of all sampling results must be provided to the property owner, the Harford County Health Department (Attn. Ms. Lisa Kalama) and the Oil Control Program's case manager.

- 6) Within 45 days of each sampling event, submit a quarterly report to the Oil Control Program detailing the results of the event.
- 7) When submitting reports, include data summary tables and scaled site maps showing actual sampling locations (i.e., monitoring well and tank field well locations). In the discussion of supplemental sampling events, include details on sampling procedures and describe analytical results in terms of media sampled. Reports must include groundwater flow maps, dissolved concentration maps, and qualitative and quantitative discussions regarding the sampling results and trends.

When submitting documentation to the Oil Control Program, provide three hard copies and a digital copy on a labeled compact disk (CD). If you have any questions, please contact the case manager, Mrs. Susan Bull, Eastern Region Supervisor, at 410-537-3499 (email: susan.bull@maryland.gov), or me at 410-537-3389 (email: andrew.miller@maryland.gov).

Sincerely,



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

SRB/nln

cc: Mrs. Julie Makert (Harford County Health Dept.)
Mr. David Kaminkow (Owner 2929 Charles Street)
Mr. and Mrs. Joseph Kaminkow (Owners 2931 and 2933 Charles Street)
Mr. and Mrs. Potter (Owners 2932 Charles Street)
Mr. and Mrs. Hurlock (Owners 2935 Charles Street)
Mr. and Mrs. Rasmussen (Owners 2936 Charles Street)
Mr. and Mrs. Reese (Owners 3006 Charles Street)
Mr. Eric Svendsen, Environmental Scientist (TransCanada 2220 Rutledge Road)
Mr. and Mrs. Parris (Owners 2226 Rutledge Road)
Mr. and Mrs. Hornbeck (Owners 2230 Rutledge Road)
Mr. Christopher H. Ralston
Ms. Hilary Miller