



# Maryland

## Department of the Environment

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

Ben Grumbles, Secretary  
Horacio Tablada, Deputy Secretary

August 12, 2020

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

**RE: WORK PLAN APPROVAL**  
**Case No. 2018-0459-HA**  
**Colonial Pipeline Bel Air Pumping Station**  
**2942 Charles Street, Fallston**  
**Harford County, Maryland**

Dear Mr. Carpenter:

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 *Monitoring Well Installation and Groundwater Delineation Remedial Investigation/Remedial Action Work Plan*, dated June 18, 2020. This case was opened following the March 7, 2018 release of fuel from a corrosion perforation discovered in the booster loop. The groundwater at this site has been monitored since 2018 by successive mobilizations and well installations. The current monitoring well network consists of 13 monitoring wells and 5 recovery wells. Two monitoring wells, MW-12 and MW-13, were installed in December 2019 in locations downgradient from the recovery well 5 (RW-5) area and between downgradient monitoring wells MW-6 and MW-9. A third monitoring well, MW-14, was proposed and approved for installation during the December 2019 mobilization, downgradient of MW-6. However, MW-14 was not installed at the time due to equipment access issues and safety concerns.

The *Remedial Investigation/Remedial Action Work Plan* proposes the installation of five additional monitoring wells for further delineation of dissolved phase groundwater concentrations downgradient of MW-12 and MW-13. Three monitoring wells (MW-14, MW-15, and MW-16) are proposed to be installed during initial mobilization, with two additional wells (MW-17 and MW-18) proposed as contingency wells based on the groundwater sampling results and subsequent groundwater potentiometric maps. The proposed location for MW-14 is in the facility driveway downgradient of MW-13. MW-15 and MW-16 are proposed to be installed downgradient to side-gradient of MW-13. Contingency well MW-17 will be installed further down the driveway area from MW-14, if needed, based on subsequent monitoring. Lastly, contingency well MW-18 is proposed to be installed in the initially proposed location of MW-14, downgradient of MW-6.

The *Remedial Investigation/Remedial Action Work Plan* proposes that soil cores will be collected and continuously logged and field screened with a photo-ionization detector (PID) prior to installation of the monitoring wells. Soil samples will be collected from the soil/groundwater interface and the interval exhibiting the highest PID response. If no PID response is observed or the highest PID response is observed at the soil/groundwater interface, only one soil sample will be collected. All soil samples will be collected in accordance with EPA Method 5035 and analyzed for full-suite volatile organic compounds (VOCs), including naphthalene and fuel oxygenates, using EPA Method 8260 and total petroleum hydrocarbons - diesel and gasoline range organics (TPH-DRO and TPH-GRO) using EPA Method 8015. The monitoring wells are proposed to be completed as 2-inch diameter wells.

Based on the available information reviewed for the case, MDE hereby approves implementation of the *Remedial Investigation/Remedial Action Work Plan* contingent upon the following modifications:

- (1) The OCP concurs with the proposed installation of MW-14, MW-15, and MW-16 during initial mobilization. In addition, the installation of MW-18 must be completed during initial mobilization to further delineate dissolved phase groundwater impacts downgradient of MW-6. The OCP concurs with the installation of MW-17 at a later date contingent upon the groundwater sampling results and subsequent potentiometric maps.
- (2) The OCP approves the use of 2-inch diameter monitoring wells if liquid phase hydrocarbons (LPH) are not encountered. LPH are not expected to be present based on available site monitoring data; however, your well driller must be prepared to install 4-inch diameter monitoring wells in the event LPH are encountered.
- (3) The OCP concurs with the proposed logging and sample collection. During the collection of soil cores prior to monitoring well installation, all soils must be continually logged and field screened with a PID.
  - a. Soil samples for laboratory analysis must be collected in each boring at the soil/groundwater interface and from the interval exhibiting the highest PID response. If no PID response is observed or the highest PID response is observed at the soil/roundwater interface, only one sample will need to be collected.
  - b. All soil samples submitted for laboratory analysis must be collected and field preserved in accordance with EPA Method 5035.
  - c. All soil samples submitted for laboratory analysis must be analyzed for full-suite VOCs, including fuel oxygenates and naphthalene, using EPA Method 8260 and TPH-DRO and TPH-GRO using EPA Method 8015.
- (4) The new wells must be developed using active surging in addition to pumping/purging. All installed wells must be surveyed into the existing monitoring well network and depicted on an updated site map.

- (5) **No less than 10 days after well development and quarterly thereafter (every 3 months),** collect groundwater samples from the newly installed wells that do not exhibit LPH. All samples submitted for laboratory analysis must be analyzed for full-suite VOCs using EPA Method 8260 and TPH-DRO and TPH-GRO using EPA Method 8015.
  
- (6) **Within 45 days of completing the approved remedial activities,** submit a *Well Installation and Remedial Action Summary Report*. At a minimum, this *Report* must include: well completion reports; detailed data summary tables and scaled site maps showing monitoring/recovery well locations; a discussion of supplemental sampling events including details on: sampling procedures; analytical laboratory results and chain of custody; conclusions and recommendations; and soil and liquid disposal receipts. Reports must also include amended groundwater contour maps; site cross-section maps depicting significant site features; corrected groundwater flow; and dissolved concentration maps.

Notify OCP at least five (5) working days prior to conducting any work at this site so we have an opportunity to observe field activities. When submitting documentation, provide three hard copies and one electronic copy. If you have any questions, please contact Ms. Lindley Campbell at 410-537-3387 (email: [lindley.campbell1@maryland.gov](mailto:lindley.campbell1@maryland.gov)) or me at 410-537-3499 (email: [susan.bull@maryland.gov](mailto:susan.bull@maryland.gov)).

Sincerely,



Susan R. Bull, Eastern Region Supervisor  
Remediation Division  
Oil Control Program

cc: Mr. David Kudla, Project Manager, TRC Environmental Corp.  
Mr. John Resline, Acting Director, Environmental Health, Harford County Health Dept.  
Mr. Andrew B. Miller, Chief, Remediation Division, Oil Control Program  
Mr. Christopher H. Ralston, Program Manager, Oil Control Program