



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, ext. 3442

Martin O'Malley
Governor

Robert M. Summers, Ph.D.
Secretary

Anthony G. Brown
Lieutenant Governor

December 29, 2014

Ms. Pushpinder Sandhu
13007 Twelve Hills Road
Clarksville MD 21029

RE: WORK PLAN APPROVAL
Case No. 2012-0677-AA
H&J BP Subway
738 MD Route 3 North, Gambrills
Anne Arundel County, Maryland
Facility I.D. 11762

Dear Ms. Sandhu:

The Oil Control Program recently completed a review of the case file for the above-referenced property, including the *Step-Out Delineation Work Plan - November 17, 2014*. The *Work Plan* proposes to install two 2-inch diameter down-gradient monitoring wells in off-site locations at 743 Route 3 North. The monitoring wells will be installed using hollow stem auger technology to a depth of approximately 10 feet below the first groundwater encountered using 20 feet of well screen. The collection of split spoons was proposed between 55 feet below grade to the final depth of the borehole. The Department hereby approves the *Step-Out Delineation Work Plan - November 17, 2014* contingent upon the following modifications:

- 1) An off-site access agreement must be in place prior to conducting utility mark-out and drilling work. Contact the case manager to schedule a well mark-out meeting once the access agreement is in place, utilities have been marked out, and prior to conducting the work.
- 2) Due to the potential for unknown off-site petroleum sources, split spoon sampling must be performed at 5-foot intervals from the ground surface to 55 feet below ground surface (bgs) and then continuously below 55 feet bgs to the terminal depth of the borehole.
- 3) Soil samples must be collected from each boring and analyzed for full-suite volatile organic compounds (VOCs), including fuel oxygenates and naphthalene, using EPA Method 8260 and for total petroleum hydrocarbons – diesel and gasoline range organics (TPH-DRO and GRO) using EPA Method 8015. All soil samples collected for volatile analysis must be collected and field preserved in accordance with EPA Method 5035. At a minimum, one soil sample must be collected for laboratory analysis from each boring at the depth that corresponds to the highest photo-ionization detector (PID) readings. If all PID readings are zero, collect the soil sample from the interval groundwater is encountered.

- 4) Baseline groundwater samples must be collected from the new monitoring wells. The samples must be analyzed for full-suite VOCs, including fuel oxygenates and naphthalene, using EPA Method 8260 and for TPH-DRO and GRO using EPA Method 8015. After baseline sampling, the sampling of MW-09 and MW-10 may conform to the monitoring well sampling schedule approved in the Oil Control Program's *Request for Step-Out Delineation Work Plan - October 16, 2014* letter (copy enclosed).
- 5) All soil and groundwater waste generated for this site must be properly containerized for off-site disposal.
- 6) The well construction *Report of Results* must be submitted to the Oil Control Program **no later than April 15, 2015**. The report must include a detailed description of the work conducted, a site map, soil and groundwater sampling results, lab sheets, boring logs including PID readings, and disposal receipts.
- 7) Future reports must include site maps that show off-site monitoring wells and area drinking water supply well locations.

All documentation submitted to the Oil Control Program must include three hard copies and a digital copy on a labeled compact disc (CD). If you have any questions, please contact the case manager, Mr. Michael Edillon, at 410-537-4151 (email: michael.edillon@maryland.gov) or me at 410-537-3482 (email: ellen.jackson@maryland.gov).

Sincerely,



Ellen Jackson, Central Region Section Head
Remediation and State Lead Division
Oil Control Program

ME/nln

Enclosure: Request for Step-Out Delineation Work Plan – October 16, 2014

cc: Mr. Baldev Singh (Station Operator)
Mr. Gary Lasako (BP Environmental, Inc.)
Baldwin Investors (743 MD Route 3 North)
Mr. Brian Chew (Anne Arundel County Health Dept.)
Ms. Ginger D. Klingelhoef-ellis (Anne Arundel County DPW)
Mr. Andrew B. Miller
Mr. Christopher H. Ralston
Mr. Horacio Tablada



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October 16, 2014

Ms. Pushpinder Sandhu
13007 Twelve Hills Road
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RE: REQUEST FOR STEP-OUT DELINEATION WORK PLAN
Case No. 2012-0677-AA
H&J BP Subway
738 MD Route 3 North, Gambrills
Anne Arundel County, Maryland
Facility I.D. No. 11762

Dear Ms. Sandhu:

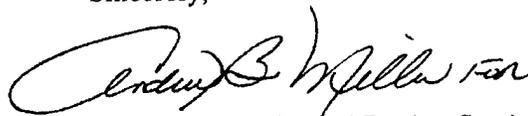
The Oil Control Program recently completed a review of the case file for the above-referenced property, including the 2nd *Quarter 2014 Progress Report - July 31, 2014*. Liquid phase hydrocarbons (LPH) have not been detected at the site since enhanced fluid recovery was conducted from the tank field monitoring pipes in October 2012. Dissolved phase petroleum hydrocarbons have been detected in on-site monitoring wells and tank field monitoring pipes at elevated levels; however, on-site and off-site drinking water supply well sampling has been non-detect for petroleum constituents. The report included recommendations for reduction in the frequency of gauging, the frequency of site potable well sampling, groundwater sampling parameters, and the installation of two additional monitoring wells. The Department hereby provides the following comments and requirements:

- 1) The Oil Control Program approves the recommendation to reduce the frequency of monitoring well and tank field monitoring pipe gauging from monthly to quarterly (every three months). If LPH are detected, the Oil Control Program must be notified within 24 hours and monthly gauging must continue.
- 2) The Oil Control Program approves the recommendation to reduce the sampling frequency for the on-site drinking water supply well from quarterly to semi-annually (twice a year). The supply well must be sampled in the 2nd and 4th quarters. Sample collected must be analyzed for full- suite volatile organic compounds (VOCs), including fuel oxygenates and naphthalene, using EPA Method 524.2.
- 3) The Oil Control Program approves the recommendation to decrease sample analytical parameters as proposed, however, during every 4th quarter all monitoring wells must be sampled and analyzed for full- suite VOCs, including fuel oxygenates and naphthalene, using EPA Method 8260.

- 4) Any new monitoring wells installed must be initially sampled for full-suite VOCs, including fuel oxygenates and naphthalene, using EPA Method 8260 to establish a baseline. After baseline sampling, sample analysis may switch to the decreased analytical sampling schedule.
- 5) The Oil Control Program approves the recommendation for installation of two additional monitoring wells. A *Work Plan* must be submitted for review and approval **no later than November 18, 2014**. The *Work Plan* must detail the locations of the wells (on a site map), well construction plans, and methods. Please note all future recommendations (i.e., proposals for delineation, remediation) must be submitted separately as stand-alone documents and not in quarterly reports.
- 6) The gauging and sampling results data tables are difficult to read in the current quarterly report layout. Adjust the tables so they conform to the example tables displayed in the Department's *Maryland Environmental Assessment Technology (MEAT) for Leaking Underground Storage Tanks* guidance document, Appendices H and I. At a minimum the "parameter" column headings should display benzene, toluene, ethylbenzene, xylene, naphthalene, methyl tertiary-butyl ether (MTBE), and other analyte detections. A copy of the MEAT document can be obtained here:
http://www.mde.state.md.us/assets/document/MEAT_Guidance.pdf
- 7) When the new sample results table is constructed, include well construction information (total depth, well diameter, screen interval) beneath the well ID in the "Well No." column.

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Sincerely,



Ellen Jackson, Central Region Section Head
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