July 25, 2019

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

Ms. Florence Rosen
Rosen Associates Management Corporation
33 South Jericho Road
Jericho, New York 11753

RE: WORK PLAN APPROVAL
Case No. 2011-0112-HA
Bel Air Xtra-Mart 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 (MDE) Oil Control Program (OCP) completed a review of the case file for the above-referenced property, including the *Horizontal and Vertical Delineation Work Plan*, dated Apr. 19, 2019. A *Settlement Agreement and Consent Order*, under OCP Case Nos. 2011-0112-HA and 2013-0007-HA, was executed by MDE on Oct. 11, 2016 ("Consent Order"). Between Nov. and Dec. 2016, all fueling operations at this facility ceased with the removal of 5 underground storage tanks (USTs), all associated dispensers and piping, and 1,338.62 tons of petroleum-impacted soil. Groundwater monitoring is currently conducted with a network of 14 monitoring wells (6 on site, 1 well pair off site, and 2 well clusters off site). Sampling of the monitoring well network in Apr. 2019 detected:

- Benzene ranging from 3.0 to 48.3 parts per billion (ppb);
- Ethylbenzene at 1,510 ppb;
- Methyl tertiary-butyl ether (MTBE) ranging from 16.8 to 4,330 ppb;
- Total petroleum hydrocarbons-diesel range organics (TPH-DRO) at 5,060 ppb; and
- Total petroleum hydrocarbons-gasoline range organics (TPH-GRO) ranging from 1,040 to 23,600 ppb.

Although the facility is served by municipal water, adjacent properties utilize private drinking water supply wells. Off-site monitoring of select private drinking water wells continues as directed by the OCP.
The Horizontal and Vertical Delineation Work Plan includes the installation of a monitoring well cluster at 2350 East Churchville Road (La Tolteca Mexican Restaurant). Additional locations have been selected if access is not granted to drill at the proposed location. The Work Plan proposes to drill 3 separate boreholes to install the required overburden/shallow, intermediate, and deep water bearing zones to the west of the site. The separate boreholes were selected to ensure proper grouting and sealing of the distinct zones and to prevent borehole communication. The overburden monitoring well is proposed to be installed to a depth of approximately 30 feet utilizing hollow stem augers. Soils will be field-screened continuously for volatile organic compounds (VOCs) utilizing a calibrated photo-ionization detector (PID) and the lithology documented. The Work Plan proposes the collection and laboratory analysis of a soil sample from the highest PID interval or just above the water interface if no readings are detected for analysis of full-suite VOCs using EPA Method 8260 and TPH-DRO and TPH-GRO using EPA Method 8015.

The intermediate monitoring well is proposed to be installed to a depth of approximately 80 feet, and the deep monitoring well is proposed to be installed to a depth of approximately 200 feet utilizing air rotary from the ground surface. Once the intermediate and deep monitoring wells have been drilled to termination depths, geophysical investigation will be completed from approximate depths of 40 to 80 feet below the ground surface (bgs) in the intermediate monitoring well and from approximate depths of 100 to 200 feet bgs in the deep monitoring well. The geophysical investigation will consist of the following data collection methods: caliper, natural gamma, fluid temperature, electrical logs - fluid resistivity and single point resistance, optical or acoustic televiewer, and heat pulse flowmeter - both ambient and pumping at finite number of select intervals.

Based on previous site knowledge and pursuant to paragraphs 30 – 32 of the Consent Order, MDE hereby approves the proposed Work Plan contingent upon the following modifications:

1) The OCP suggests working closely with Rosen Associates to secure access to install the required well cluster. **If access cannot be secured, MDE must be notified no later than Aug. 15, 2019.**

2) **No later than Sept. 27, 2019,** install the proposed monitoring well cluster. The well cluster must be centered closer to the former station (see enclosed site map); however, final locations of the proposed wells may be field-modified based on the location of underground utilities and the property access agreement. Complete monitoring well installation under the direct supervision of a Maryland-licensed well driller. It is the responsibility of the RP Group and its contractors to obtain all drilling permits from the Harford County Health Department prior to drilling.

3) Soil samples must be collected from the proposed overburden well at both the soil/groundwater interface and from the location in the soil core exhibiting the highest PID response. If no PID response is observed or the highest PID response is observed at the soil/groundwater interface, only 1 sample will need to be collected.

4) All soil samples must be collected and field preserved in accordance with EPA Method 5035 and analyzed for full-suite VOCs, including fuel oxygenates and naphthalene, using EPA Method 8260 and TPH-DRO and TPH-GRO using EPA Method 8015B.
5) All petroleum-impacted waste material generated during assessment activities must be properly stored and disposed. Waste disposal documentation must be provided to the OCP.

6) OCP representatives must be present for all proposed geophysical studies. The OCP reserves the right to require packer testing and discrete interval sample collection if site conditions warrant.

7) The new overburden well must be developed using active surging in addition to pumping/purging. All installed wells must be surveyed and accurately depicted on a map.

8) **Upon completion of geophysical testing**, groundwater samples must be collected from all wells and/or zones as directed by the OCP. All samples collected 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 8015B.

9) **Within 45 days of completing well installation**, submit a Well Installation Summary Report. This Report, at a minimum, must include well completion reports, detailed data summary tables, scaled site maps showing monitoring/recovery well locations; a discussion of supplemental sampling events and details on sampling procedures. Future reports must also include amended groundwater contour maps, site cross-section maps depicting significant site features, corrected groundwater flow, and dissolved concentration maps.

10) The OCP reserves the right to require the installation of additional monitoring wells if full delineation is not achieved with the proposed monitoring well network.

Your continued cooperation under the Consent Order is appreciated. If you have any questions, please contact Ms. Lindley Campbell at 410-537-3387 *(lindley.campbell1@maryland.gov)* or me at 410-537-3499 *(susan.bull@maryland.gov)*.

Sincerely,

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

Enclosure: Site Map

cc: Ms. Andrea Taylorson-Collins, Groundwater & Environmental Services, Inc.
Ms. Julie Mackert, Director, Bureau of Environmental Health, Harford County Health Dept.
Ms. Lindsay Campbell, Case Manager, Remediation and State-Lead Div. Oil Control Program
Mr. Andrew B. Miller, Chief, Remediation and State-Lead Div., Oil Control Program
Mr. Christopher H. Ralston, Program Manager, Oil Control Program
Ms. Julie Kuspa, Assistant Attorney General, Office of the Attorney General
Ms. Kaley Laleker, Director, Land and Materials Administration
LEGEND
- Monitoring Well
- Abandoned Monitoring Well
- Proposed MW-215/WD
- Potential back-up well locations at 2310 or further downgradient property (not visible) 2308 E Churchville Road

Site Map
Bel Air Xtra Fuels
2478 Churchville Road
Bel Air, Maryland

GES
Diagram No. 3
4/7/98
Scale 1:2400

MW-215 well cluster