June 16, 2021

Mr. Ben Wood
Project Manager
ExxonMobil Environmental Services
1900 East Linden Street
Linden, NJ 07036

RE: APPROVAL OF SEQUENTIAL RECOVERY WELL CONVERSIONS
Case No. 2006-0303-BA
Former Exxon R/S No. 2-8077
14258 Jarrettsville Pike, Phoenix
Baltimore County, Maryland

Dear Mr. Wood:

The Maryland Department of the Environment's (MDE) Oil Control Program (OCP) completed a review of the *Sequential Conversion of Select Wells Proposed Work Plan*, dated May 26, 2021, and the *1st quarter 2021 Groundwater Monitoring and Remedial Status Report*, dated May 13, 2021. The report includes the proposal to convert five recovery wells pursuant to the *Remediation Progress Report and Rebound Test Work Plan*, dated February 8, 2021, and MDE's response letter dated April 23, 2021. The proposed *Work Plan* includes the following activities:

A total of seven sequential recovery well shutdowns were completed over the period of 2010 through 2020 with no significant sustained rebound of petroleum concentrations observed. The last sequential shutdown of recovery wells occurred between June and August 2020. Like previous shutdown procedures, the five recovery wells will be sequentially shut down all at one time and monitored (gauged and sampled) monthly for three months. If no adverse conditions are observed, the wells will remain as monitoring wells and future sampling will revert to the pre-shutdown monitoring schedule. The following recovery wells are proposed for rebound assessment shutdown: MW-16, MW-27, MW-54B, MW-82D, and MW181A.

In addition, five monitoring wells (MW-7, MW-27B, MW-32, MW-38B, and MW-82B) will be gauged and sampled monthly for three consecutive months. Following monitoring well gauging and sampling, these wells will revert to the previously approved sampling frequency. After completion of shutdown and the post-shutdown monitoring event, provided no adverse conditions are observed, the converted recovery wells will remain as monitoring wells with gauging and groundwater sampling performed in accordance with the pre-shutdown monitoring schedule.

The OCP reviewed the May 26 proposal and requested additional details regarding sampling methods of each of the proposed recovery wells since three of the wells were installed at depths and in bedrock (open borehole). Additional details of the proposed sampling plan were provided in a table format via email (copy enclosed).

Based on the current land use, the available information reviewed for this case, including a review of the monitoring well network construction details, historical and current dissolved phase hydrocarbon concentrations, locations of remaining recovery wells, locations of monitoring wells relative to recovery wells, a comprehensive monitoring well network for continued monitoring during the remainder of cleanup activities and post-remedial monitoring, and after conducting a risk-based analysis, MDE approves the proposal to convert the five recovery wells contingent upon the following comments and requirements:

Recovery Well Shutdown:

The MDE approves the discrete zone sampling intervals proposed for monitoring well MW-54B, the composite interval sampling plan for MW-82D, MW-82B, and the three well volume purge and sampling depths of the remaining wells. With regard to wells MW-54B, MW-82D, and MW-82B, please implement the following:

- For the first two months, following the collection of the approved discrete zone and/or composite interval samples, the wells must also be sampled by purge/sample methodology in a manner that matches the more recent pumping well sampling method, to the extent possible. Use of a pump set at the former pumping depth is appropriate. This requirement is intended to provide data for comparison purposes of both historic interval sampling data and the more recent sampling data collected during remediation pumping activities.

- Following the first two months of dual sampling data collection, the Department will determine if the dual sampling methods need to continue or if sampling may revert to only the purge/sample methodology used during the first two sampling events for each well. Submit summarized data from the first two sampling events along with historic data in a manner that allows for efficient comparison and evaluation by OCP staff. Dual sampling methods must continue until written approval to modify the sampling methodology is issued by OCP.

Rebound Monitoring Wells:

With regard to the five monitoring wells proposed for increased gauging and sampling to monitor rebound conditions, OCP requires two additional monitoring wells be gauged and sampled.

- MW-121 is to be included in the monitoring plan to be gauged and sampled monthly, then revert to the current sampling frequency.
- MW-133C must be sampled via discrete zone sampling on a semi-annual basis. The discrete zones to be sampled for well MW-133C are 76, 107, and 170 feet, which are the zones sampled historically. Groundwater monitoring of this well must continue until further notice.

The MDE requests modification to Figures in future quarterly update reports. Please modify the figures of both the East and West MTBE concentration maps for the monitoring/recovery wells sampled so all monitoring/recovery well designations are noted. In addition, the sampling results must be noted on the figures for all wells sampled. This is to replace the color-coding and concentration ranges used in lieu of actual data.

A final *Report of Results* with all data must be submitted to OCP within 45 days upon completion of field activities, including all recovery well shutdown and post-shutdown monitoring activities associated with the *Work Plan*. If you have any questions, please contact Ms. Ellen Jackson at 410-537-3482 (ellen.jackson@maryland.gov) or me at 410-537-3389 (andrew.miller@maryland.gov).

Sincerely,

Andrew B. Miller, Chief
Remediation Division
Oil Control Program

Enclosure: Email June 3, 2021 Regarding Sampling Plan

cc: Alicyn Craig, Esquire, ExxonMobil Corporation
Mr. Mark Schaaf, Kleinfelder East, Inc.
Mr. Kevin Koepenick, Manager, Groundwater Management Section, Baltimore County DEPS
Ms. Ellen Jackson, Case Manager, Remediation Division, Oil Control Program
Ms. Julie Kuspa, Office of Attorney General
Mr. Christopher H. Ralston, Program Manager, Oil Control Program