

FACT SHEET

MDE Case 94-1251-HA
Former Upper Crossroads Exxon
2800 Fallston Road, Fallston
Harford County, Maryland

Site Location

The Maryland Department of the Environment (MDE), Oil Control Program (OCP) in corporation with the Harford County Health Department (HCHD), ExxonMobil, and ExxonMobil's environmental consultants are continuing to evaluate the impact of methyl tertiary-butyl ether (MTBE) to drinking water supply wells in the Upper Crossroads area of Fallston, Maryland. The MDE has deemed that the former Exxon service station, located at 2800 Fallston Road, is responsible for the MTBE in the groundwater in this area. Other potential sources of the contamination have been investigated by MDE.

Site History

The MDE and the HCHD have investigated water quality in the Upper Crossroads area since August of 1990, when the HCHD initiated annual sampling of area commercial drinking water supplies. Samples collected in April of 2000 detected MTBE at a concentration of 92 parts per billion (ppb) in an active drinking well on a commercial property. The MDE required Exxon to install a carbon filtration system on the impacted well and to conduct further subsurface investigation to delineate the extent of petroleum contamination (including MTBE) in the groundwater. Installation and sampling of groundwater monitoring wells on the service station property confirmed the presence of MTBE in the groundwater on the Exxon property. No other petroleum compound was discovered during monitoring well sampling. Based on the results of this investigation, a groundwater monitoring program was initiated both on-site and off-site.

Environmental Investigation and Actions

In April 2005, following the discovery of MTBE within the on-site shallow monitoring well network in excess of 6,000 ppb and the confirmation of the presence of MTBE in area residential drinking water wells, ExxonMobil decommissioned the active underground storage tank (UST) system at the subject location. ExxonMobil began the installation of an expanded network of shallow, intermediate, and deep groundwater monitoring and recovery wells both on-site and off-site. In April 2006, dual phase (groundwater and vapor) recovery began at the subject location. Dual phase recovery continued from April 2006 until June 2008. During this recovery period approximately 5.11 million gallons of groundwater was treated for MTBE contamination. In June 2008, a temporary system shut down was initiated to permit the groundwater levels to recover to historic levels and to determine the status of the petroleum contamination as the groundwater levels recharged. Permission was granted by the Department to extend the *Rebound Assessment* until December 2009, due to lack of groundwater recharge and insufficient levels of MTBE to warrant continued pump and treat remediation.

Current Status

Groundwater gauging data collected in May 2010 confirmed that ground water levels had finally returned to historic depths. Groundwater samples collected from the network of 99 shallow, intermediate, and deep monitoring wells in May 2010 confirmed that levels of MTBE, although present at a 178 ppb in recovery well RW-7, were greatly reduced from

historic levels of 6,430 ppb in February 2005. Based upon the continued decreasing trends of MTBE within the monitoring well network and the drop in actionable levels of MTBE in all but one of the private drinking water wells, the Department approved the permanent shut-down of the groundwater pump and treat system at this location and requested the submission of a Post-Remedial Monitoring Plan that fully detailed the post remedial monitoring schedule; any contingencies to be implemented if MTBE levels are determined through sampling to be increasing; and what threshold of MTBE will trigger implementation for targeted recovery actions.

Drinking Water Well Sampling and Treatment

- To date 360 area drinking water wells have been sampled and monitored.
- 205 wells have never revealed detectable levels of MTBE
- Originally 16 drinking water wells exhibited MTBE detections above 20 ppb (State action level)
- By September 27, 2007, there were only four drinking water wells with MTBE detections above 20 ppb

Future Updates

- Numerous letters from ExxonMobil to citizens within the area regarding sampling and site updates
- Postings on www.mde.state.md.us
- File available at the MDE Headquarters and Harford County Health Department

Contacts

- Maryland Department of the Environment - Oil Control Program: 410-537-3442
- Harford County Health Department: 443-643-0322 or 443-643-0307
- ExxonMobil Information: 1-877-294-8612

Disclaimer

The intent of this fact sheet is to provide the reader a summary of site events as they are contained within documents available to MDE. To fully understand the site and surrounding environmental conditions, MDE recommends that the reader review the case file that is available at MDE through the Public Information Act. The inclusion of a person or company's name within this fact sheet is for informational purposes only and should not be considered a conclusion by MDE on liability, involvement in a wrongful act or contribution to environmental damage.