



# ENVIRONMENTAL INVESTIGATION WALLY'S CITGO 19200 MIDDLETOWN ROAD, PARKTON BALTIMORE COUNTY, MARYLAND MDE CASE NO. 2006-0319-BA (OPEN)

#### SITE LOCATION

The Maryland Department of the Environment, Oil Control Program (MDE-OCP), in coordination with the Baltimore County Department of Environmental Protection and Sustainability, has been evaluating impacts and monitoring cleanup activities associated with a release of petroleum hydrocarbons, specifically methyl tertiary-butyl ether (MTBE), from Wally's Citgo station located at 19200 Middletown Road. This active facility is located on a groundwater divide and is underlain by geology known as the Pretty Boy Schist of the Wissahickon Group. Currently, there are three on-site drinking water supply wells serving businesses at 19200 Middleton Road and a monitoring well network of 41 wells. Depth to groundwater is approximately 33.5 to 52 feet, and depth to competent bedrock ranges between 30 and 33 feet. Groundwater flow conditions in the shallow weathered overburden and bedrock are controlled primarily by lineaments.

MTBE is a fuel additive commonly used to reduce carbon monoxide and ozone levels caused by auto emissions. There is no national regulatory standard for MTBE in drinking water. In 1997, the U.S. Environmental Protection Agency issued an advisory for MTBE based on taste and odor of 20 to 40 parts per billion (ppb). Although the EPA has not established a regulated maximum contaminant level for MTBE, the State of Maryland adopted an action level of 20 ppb.

Wally's Citgo is an active service station that currently operates three double-walled steel USTs: a 12,000-gallon gasoline; a 10,000-gallon diesel; and an 8,000-gallon gasoline. These tanks were installed in February 2008 and are currently registered to Carroll Independent Fuel (CIF). In January 2008, the three original USTs installed in 1990 were removed. Soils in the tank field were over-excavated for proper disposal off-site. A 2,000-gallon diesel aboveground storage tank with underground single-walled, fiberglass-reinforced plastic piping is also in operation at this facility.

# **SITE HISTORY**

In October 2005, MDE became aware of this environmental problem at Wally's Citgo upon receiving groundwater sampling results for three newly installed monitoring wells located near the UST systems. Monitoring wells were installed in August 2005 to satisfy the State's



Emergency Regulations, which went into effect in January 2005 for regulated gasoline UST systems located in high-risk groundwater use areas.

#### ENVIRONMENTAL INVESTIGATIONS AND ACTIONS

The MDE has provided direction and oversight of CIF's investigation of the extent of contamination from the service station, as well as sampling operations throughout the Parkton area. MDE required the installation of 41groundwater monitoring wells in the study area to investigate and monitor the dissolved phase petroleum contamination. A soil vapor extraction system operated on-site from August 2006 until January 2008 to remediate the contamination from the subsurface. Between December 2007 and January 2008, the UST system was removed and replaced. Approximately 99.25 tons of oil-contaminated soil was also removed during UST system upgrade. Forty-four potable wells in the vicinity of the station have been sampled. MTBE was detected above the State's action level in three potable wells. CIF maintains granular activated carbon (GAC) filtration systems at three impacted residential properties.

### **CURRENT STATUS**

In October 2009, MDE approved the *Corrective Action Plan (CAP)*, which proposed the installation of a groundwater pump-and-treat remediation system to reduce dissolved phase petroleum contamination and impacts to off-site drinking water wells. In October 2011, a *CAP Addendum* was approved, which detailed the discharge of treated groundwater from the remediation system to an infiltration gallery. The groundwater pump-and-treat remediation system was started in December 2011 and is currently in operation. The MDE approved biweekly pulsing of the remediation system in January 2014 in order to increase recovery of dissolved phase hydrocarbons.

In March 2014, the MDE agreed to CIF's request to reduce requirements regarding monitoring well sampling, potable well sampling, and monitoring well installation based on a statistical analysis of data collected to date and site hydrogeology. Currently, 31 monitoring and recovery wells are sampled quarterly and 11 monitoring wells are sampled semi-annually. One potable well is sampled monthly, two are sampled quarterly, and ten are sampled semi-annually. The MDE-OCP does not anticipate expanding the off-site residential sampling effort beyond sampling needed to ensure community safety.

## **FUTURE UPDATES**

- Postings on <u>www.mde.maryland.gov</u>
- File available at the MDE Headquarters

# **CONTACTS**

- Maryland Department of the Environment, Oil Control Program: 410-537-3442
- Baltimore County Health Department: 410-887-2243

## **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.