



Maryland Department
of the Environment

FACTS ABOUT: SHEETZ STORE #176

ENVIRONMENTAL INVESTIGATION SHEETZ STORE #176 3842 BURKITTSVILLE ROAD KNOXVILLE, FREDERICK COUNTY, MARYLAND MDE Case No. 2003-1758-FR

SITE LOCATION

The Maryland Department of the Environment (MDE), Oil Control Program (OCP), has evaluated the impact of methyl tertiary-butyl ether (MTBE) to drinking water supply wells in the Knoxville Burkittsville area. Sheetz, Inc. has operated this facility as an active gasoline retail outlet and convenience store since 1990. The site remains an active service station operating four underground storage tanks (USTs): one 12,000-gallon gasoline, one 10,000-gallon gasoline, one 6,000-gallon gasoline, and one 6,000-gallon kerosene. These USTs are double-walled, cathodically-protected steel tanks with double-walled flexible plastic piping. The site has Stage I and Stage II vapor recovery systems. Currently, 18 monitoring wells and 4 tank field monitoring wells are located on-site and off-site. The facility is located in a mixed commercial-residential use area served by private wells.

SITE HISTORY

In May 2003, the OCP opened a case in response to receiving notification that the on-site drinking water supply well was impacted with MTBE at 220 parts per billion (ppb). In addition, several tank field monitoring pipes had detections of petroleum constituents above regulatory levels. A preliminary subsurface investigation in June 2004 revealed MTBE at 215,000 ppb, benzene at 970 ppb, and toluene at 1,060 ppb. The Department required further site characterization to delineate the full extent of petroleum contamination in the groundwater, including the shallow and deep groundwater zones.

ENVIRONMENTAL INVESTIGATION AND ACTIONS

Currently, 18 monitoring wells exist on and off-site; of these, 11 are located in the shallow overburden and 7 penetrate the deeper bedrock zones. Six of these wells are used for discrete interval groundwater monitoring. A nested shallow/deep monitoring well cluster was installed on an adjacent property to finalize site characterization and the monitoring program. Select off-site private drinking water supply wells are sampled annually. The facility is served by a non-community supply well that has been retrofitted with a granular activated carbon (GAC) filtration system. At this time, the MDE-OCP does not anticipate expanding the off-site residential sampling effort beyond sampling needed to ensure community safety.

CURRENT STATUS

Current site activities include quarterly sampling of the point-of-entry treatment (POET) system, quarterly monitoring well sampling, and annual off-site potable well sampling.

FUTURE UPDATES

- Postings on www.mde.maryland.gov
- File available at the MDE Headquarters.

CONTACTS

- Maryland Department of the Environment - Oil Control Program: 410-537-3442
- Frederick County Health Department: 301-600-1719
- Sheetz, Inc. 1-800-487-5444

Disclaimer

The intent of this fact sheet is to provide the reader a summary of site events as they are contained in documents available to MDE. To fully understand the site and surrounding environmental conditions, MDE recommends 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.