



Maryland Department
of the Environment

FACTS ABOUT: ROYAL FARMS STORE NO. 96

**ENVIRONMENTAL INVESTIGATION
ROYAL FARMS STORE NO. 96
500 MECHANICS VALLEY ROAD, NORTH EAST
CECIL COUNTY, MARYLAND
MDE CASE NO. 1999-2595CE (CLOSED)
MDE CASE NO. 2011-0729CE (OPEN)**

SITE LOCATION

The Maryland Department of the Environment (MDE), Oil Control Program, is evaluating the impact of petroleum products at Royal Farms Store No. 96, located in Cecil County. This facility, operated by Two Farms, Inc., has been an active service station since 1999 when three underground storage tanks (USTs) were installed. During the summer of 2011, the MDE oversaw removal of the first generation UST system and installation of the second generation UST system. This system is comprised of two double-walled fiberglass tanks: one 30,000 gallon gasohol and one 20,000-gallon compartmentalized tank with an 8,000-gallon gasohol and a 12,000-gallon diesel compartment. The UST systems utilize double-walled, flexible plastic piping and Stage II vapor recovery. Currently, 16 shallow and 3 deep monitoring wells, 12 recovery wells, 4 tank field observation pipes, and 1 transient non-community drinking water supply well are located on-site. The groundwater flow direction is southwesterly and depth to groundwater is approximately 9 to 12 feet.

SITE HISTORY

In July 2005, the Oil Control Program received groundwater sampling results from three monitoring wells installed pursuant to Code of Maryland Regulations (COMAR) 26.10.02.03-4. Methyl tertiary-butyl ether (MTBE) was detected in a monitoring well at 740 parts per billion (ppb). The station's drinking water supply well has been sampled semi-annually since July 2005. The highest MTBE concentration detected in the supply well was 28 ppb. The station's supply well was subsequently retrofitted with a granular activated carbon filtration system in 2006. Groundwater conditions at this site were monitored on a semi-annual basis under Case No. 1999-2595-CE until March 2010, when the Oil Control Program closed the active case due to stabilized to decreasing trends in groundwater concentrations. Although the case was closed, groundwater conditions at the station continued to be monitored annually in accordance with the enhanced groundwater monitoring requirements of COMAR 26.10.02.03-4 under Facility I.D. No. 13326.



ENVIRONMENTAL INVESTIGATIONS AND ACTIONS

On June 8, 2011, the Oil Control Program received notification of a new detection of liquid phase hydrocarbons (LPH) in an on-site monitoring well. LPH were discovered during the collection of annual groundwater samples required under COMAR 26.10.02.03-4. The remaining two monitoring wells, two tank field monitoring pipes, and the on-site supply well were sampled and found to be non-detect for petroleum constituents. Prior to the June 2011 sampling event, the monitoring wells at this location had last been sampled in August 2010, when all wells were non-detect for petroleum constituents.

On June 22, 2011, in accordance with Section 4-411.2 of the Environment Article, Annotated Code of Maryland, the MDE completed a notification to all property owners within a half-mile radius of the site. Based on the June 8, 2011 detection of LPH, the responsible party, Two Farms, Inc. (dba Royal Farms): initiated interim LPH recovery through the use of vacuum extraction; completed a full UST system upgrade; finalized a shallow subsurface investigation to delineate the horizontal and vertical extent of petroleum contamination; initiated a schedule to monitor adjacent off-site drinking water supply wells; submitted a Corrective Action Plan to install and operate a dual phase recovery system using vapor extraction/groundwater extraction technology; completed the installation and geophysical survey of three bedrock monitoring wells and initiated a discrete zone sampling program for the three bedrock monitoring wells. The MDE approved the Corrective Action Plan with modifications on July 18, 2012. Installation and activation of the approved recovery system was completed in December 2012.

CURRENT STATUS

The MDE continues to monitor the success of the vapor/groundwater extraction system and local area groundwater quality through quarterly progress reports. The MDE, in cooperation with the Cecil County Health Department, continues to evaluate risks to the subsurface from petroleum contamination and will direct or conduct sampling as deemed necessary. At this time, the MDE does not anticipate sampling any additional off-site drinking water supply wells beyond sampling needed to ensure community safety.

FUTURE UPDATES

- Postings on www.mde.state.md.us
- File available at the MDE Headquarters

CONTACTS

- Maryland Department of the Environment - Oil Control Program: 410-537-3442
- Cecil County Health Department: 410-996-5160
- Two Farms Inc. (Royal Farms) Information: 410-889-0200 ext. 110



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.

