



FACTS ABOUT: HESS STATION NO. 20204

ENVIRONMENTAL INVESTIGATION HESS STATION NO. 20204 1613 EAST JOPPA ROAD, TOWSON BALTIMORE COUNTY, MARYLAND MDE CASE NO. 1991-2100BA (OPEN)

SITE LOCATION

The Hess station is located at 1613 East Joppa Road in a mixed-use commercial/residential area of Towson. The station is geologically underlain by highly metamorphosed bedrock (i.e., Baltimore Gneiss) at depths of 20 to 40 feet. The overburden consists of coarse-grained sediment, sand, and gravel, which are the remnants of a paleo river channel that existed in the area. Groundwater flow is primarily to the south. Topographically, the station is upgradient of several residential homes in the 1600 block of Yakona Road. There are no drinking water receptors in the area. Municipal water and sanitary sewer services are provided to both the Hess gas station and the surrounding area.

Gasoline retail activities have been ongoing at the Hess station since December 1982. This gas station is owned and operated by Amerada Hess Corporation (formerly Hess Realty Corporation). In April and May 1991, the original diesel and heating oil underground storage tanks (USTs) were removed. Currently, four active USTs are in operation: three 10,000-gallon gasoline and one 10,000-gallon diesel. The USTs are comprised of fiberglass reinforced plastic with double-walled piping and are equipped with Stage I and II vapor recovery systems.

SITE HISTORY

Since 1987, the Maryland Department of the Environment (MDE), in coordination with the Baltimore County Department of Environmental Protection and Sustainability (DEPS), has been evaluating the impact of petroleum hydrocarbons in the vicinity of the Hess gas station, and monitoring cleanup activities. In January 1990, the MDE Oil Control Program (OCP) took over the investigation being performed by the Baltimore County DEPS. The MDE's investigation determined that petroleum contaminated groundwater had migrated from the Hess station and was impacting residences along the 1600 block of Yakona Road. The MDE identified this Hess station as the source of the petroleum contamination and Amerada Hess as the responsible party for the investigation and cleanup activities associated with petroleum contaminants.



ENVIRONMENTAL INVESTIGATIONS AND ACTIONS

The petroleum contamination in the groundwater has been the source of gasoline odors entering residential building structures (e.g., basements, french drains). The MDE required Amerada Hess to design and implement corrective actions to abate the odor problems experienced by residents along Yakona Road. Historically, these corrective measures have included the installation of a groundwater pump-and-treat system, a soil vapor extraction system, enhance fluid recovery events, air sparging, and ventilation of select residential basement sumps. The pump-and-treat system utilized a low profile air stripper for groundwater treatment prior to discharge to the public storm sewer system behind the station. Groundwater was recovered from nine wells, located both on-site and off-site behind the residences at 1640 through 1624 Yakona Road. Based on a decreasing trend in dissolved phase petroleum concentrations, the MDE approved shut down of the remediation system in July 2010. Liquid phase hydrocarbons (LPH) have not been detected in any on-site or off-site monitoring well since July 1995.

CURRENT STATUS

A risk assessment was completed at select residential properties along the 1600 block of Yakona Road in January 2011 to determine if there was an inhalation risk associated with groundwater with an odor of petroleum in basement sumps and the French drain line. Based on the risk assessment, Amerada Hess proposed to install vapor abatement systems at four residences (1620, 1622, 1630, and 1636 Yakona Road). The MDE approved the installation of vapor abatement systems and the collection of additional indoor air samples at these residences in February 2012. Amerada Hess purchased the residential properties from 1610 through 1642 Yakona Road as part of a *Settlement Agreement* with the homeowners. Based on Amerada Hess' ownership of these properties, vapor abatement is not required at this time.

In April 2013, the MDE approved the *Conceptual Site Model - January 28, 2013*, which proposed the demolition of select residential duplex structures from 1610 through 1642 Yakona Road and redevelopment of the properties as a park/green space. In September 2013, the MDE approved the *Corrective Action Plan and Park Development Draft - August 14, 2013*, which provided additional detail regarding how the site will be redeveloped and what groundwater controls will be installed. In order to manage groundwater at the park/greenspace, a subgrade drainage pipe will be installed (in close proximity to the former French drain system); upgradient legs will be installed off of this piping; and all groundwater in the drainage piping will be gravity fed to the storm sewer for discharge. The MDE has required Amerada Hess to ensure that groundwater discharged from the site does not exceed the standards typically associated with NPDES permits and does not emit petroleum odors. The discharged groundwater will be sampled on a monthly basis and the storm drain will be field screened with a photo ionization detector (PID) on a monthly basis to ensure compliance with these requirements.

A groundwater monitoring well network is currently located on site and off site. Seven monitoring wells are gauged for the presence of LPH and sampled on a quarterly basis. Quarterly reports are submitted to the MDE for review. Additional monitoring wells and piezometers will be installed after the site is redeveloped to evaluate groundwater conditions in the park/green space.

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
- Baltimore County Health Department: 410-887-2243
- Amerada Hess Corporation: 737-750-7099

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.