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Land and Materials Administration • Oil Control Program

Environmental Investigation
Myersville Amoco/BP (formerly Chevron and Gulf)
9486 Myersville Road
Myersville, Frederick County, Maryland
Open Case No. 1990-1304 FR

The Maryland Department of the Environment (MDE), Oil Control Program (OCP), in coordination with Frederick County Health Department (FCHD), is evaluating the impact of methyl tertiary-butyl ether (MTBE) at the Myersville Amoco/BP, a service station and convenience store.

The independently owned and operated Myersville Amoco/BP (formerly branded as Chevron and Gulf) is an active gasoline retail station that has been in operation since at least the early 1980s. Multiple business entities have been involved in the ownership and operation of this petroleum retail facility. The facility currently operates three (3) 8,000-gallon gasoline tanks, and a 6,000-gallon diesel tank. These underground storage tank (USTs) are cathodically protected steel systems with piping material comprising fiberglass reinforced plastic. Five monitoring wells, four tank field observation pipes, and a transient non-community drinking water supply well are located on-site.

In December 1984, the Department of Natural Resources – Water Resources Administration (DNR-WRA precursors to the MDE) was made aware of environmental problems at the Myersville Gulf upon receiving complaints of gasoline seeping from a stream bank on a nearby farm. The DNR-WRA responded to the report; abated the threat to waters of the State; and monitored the clean-up of the release.

In August 2005, during a compliance inspection conducted at the station by the MDE-OCP, several compliance violations were noted. Due to the UST operational violations at this facility, the Department initiated enforcement actions against the owner/operator. As a result of the enforcement actions the facility was able to come into compliance. Currently the facility is in compliance for the operation of the UST systems. In November 2006, groundwater-sampling results from the three newly installed monitoring wells and two historic monitoring wells detected methyl tertiary butyl ether (MTBE) at 25,000 parts per billion (ppb) and benzene at 1,000 ppb.

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 (EPA) issued an advisory for MTBE of 20 to 40 ppb, based on taste and odor. Although the EPA has not established a regulated Maximum Contaminant Level (MCL) for MTBE, the MDE has adopted an action level of 20 ppb. Benzene is common petroleum constituent. The US EPA has established a drinking water standard referred to as the Maximum Contaminant Level (MCL) for benzene at 5 ppb.

Sampling of the on-site drinking water supply well in November 2006 detected MTBE at 38 ppb. The Department directed the station's owner/operator to install a granular activated carbon (GAC) treatment system on the drinking water well. Currently the GAC system is being maintained by the station owner/operator. The station's drinking water supply well was last sampled in April 2008 and was non-detect for petroleum constituents.

Chronology:

- December 30, 1984. DNR-WRA (DNR-WRA precursors to the MDE) received a report of gasoline losses at the Myersville Gulf Station.
- December 31, 1984. DNR-WRA (DNR-WRA precursors to the MDE) received a report of gasoline seeping from the stream bank near Middletown Road and Myersville Road.

- January 3, 1985. DNR-WRA visited the site in response to the report of gasoline loss received 12/30/84. Based upon observations of product losses and impacts to a nearby surface stream (Grindstone Run) *Site Complaint SC-OV-85-1119* was issued to AC&T Co. Inc. requiring the following:
 - Begin routine inspections of the product containment in the stream; remove product and maintain the containment;
 - Install a series of monitoring wells by 1/18/85 to determine if recovery is possible; and
 - Immediately perform a tightness test on the UST systems at the Gulf.
- January 7, 1985. DNR-WRA site visit to inspect twelve newly installed wells between the Gulf station and Grindstone Run. One of the twelve wells exhibited Liquid phase product (LPH), the remainder exhibited strong petroleum odors. Installation of the wells appears to have arrested the leeching into Grindstone Run.
- January 9-23, 1985. DNR-WRA site visit to inspect Grindstone Run.
- February 6, 1985. DNR-WRA issued a *Site Complaint SC-OV-85-119* and *Supplemental Order SC-OV-85-119A* to AC&T Co. Inc. requiring:
 - A report of the spill of gasoline to underground waters from the Myersville Gulf service station;
 - Monthly reports of product recovery; and
 - Containment booms in Grindstone Run shall only be cleaned and removed as directed by this Administration.
- February 13, 1985. DNR-WRA site visit to inspect Grindstone Run. In Stream containment needs to be replaced.
- February 14, 1985. DNR-WRA received a written account of the loss of product and recovery efforts to date.
- March 5, 1984. DNR-WRA site visit to inspect Grindstone Run.
- March 7, 1985. DNR-WRA site visit to gauge and bail all monitoring wells. Trace amounts of LPH noted in all but one well.
- March 12, 1985. DNR-WRA received written notification of the failing results for the UST tightness testing. Product was removed from all USTs and the tanks were taken out of service.
- April 12, 1985. DNR-WRA received a written update of recovery efforts:
 - March 12, 1985 all product was removed from the USTs on-site;
 - No recovery of product has occurred for 64 days and recovery equipment is scheduled to be removed; and
 - The drinking water well located on the farm where the stream seep occurred tested non-detect for petroleum constituents; and
 - Weekly monitoring wells gauging and recovery reports
- April 26, 1985. DNR-WRA directive letter approving the removal of two of three containment booms and notation that no further recovery efforts on the farm are needed at this time.
- June - July, 1985. DNR-WRA received weekly monitoring well gauging and recovery reports.
- July 11, 1985. DNR-WRA site visit to bail wells and observe conditions of the stream.
 - Approximately 10 inches of LPH was noted within the two wells located on the station property;
 - All other wells were clear; and
 - Recovery efforts were required to begin at the station.
- July 23, 1985. DNR-WRA received notification of another release from the Gulf station.
- July 22 to August 1985. DNR-WRA received weekly monitoring well gauging and recovery reports.

- August 27, 1985. DNR-WRA site visit to observe conditions of Grindstone Run – no product noted.
- September 10, 1985. DNR-WRA notified of tightness testing failure of the diesel UST following tank lining.
- September 18, 1985. DNR-WRA site visit in response to the tank test failure. Operator is working to return the diesel UST to service.
- October 9, 1985. DNR-WRA issued *Notice of Violation OV-86-331*, requiring the M.W. Farmer Company (tank tightness testing company) to immediately notify the Department of any tank test failure.
- October 3, 1985. DNR-WRA site visit to witness the UST tightness testing of the diesel tank.
- October 9, 1996. MDE-OCP site visit to witness the removal of a 1,000-gallon #2 heating oil UST. Perforations were observed in the tank. Two existing monitoring wells required to be purged and sampled.
- December 4, 1996. MDE-OCP site visit to gauge two existing monitoring wells. LPH noted in both wells.
- October 29, 2001. MDE-OCP conducted routine compliance assistance at the station.
 - No product noted in the monitoring wells, samples collected by consultant.
 - A sample was collected from the station's drinking water well.
- November 26, 2001. MDE-OCP received the results of the groundwater and drinking water samples collected 10/29/01. (*See table for results*).
- January 11, 2002. MDE-OCP issued *Notice of Violation NV-2002-069* to Mr. Raymond L. Walker (property owner/operator) in response to MTBE detection in the drinking water well at 49 ppb. The MDE required a corrective action and strongly advised the installation of a granular activated carbon (GAC) treatment system
- March 1, 2002. MDE-OCP received drinking water wells sampling results collected on 02/02/02. (*See table for results*).
- July 2, 2003. MDE-OCP received an unsigned copy of a lease agreement between facility owner (AKJK LLC and Mr. A. Kazemzadeh) and a new potential station operator (Mr. Patrick McHugh).
- July 17, 2003. A 10 year lease agreement executed between the property owner/ facility owner (Ali Kazemzadeh) and the new facility operator/lessee (POSM, LLC. t/a Myersville Amoco/BP signed by Mr. Patrick McHugh).
 - Note – *Paragraph 12. (b) Divides the responsibility for the operation and maintenance of the UST systems between the owner and operator.*
- August 17, 2005. MDE-OCP conducted a routine compliance assistance inspection at the station.
 - The tank field observation wells were dry, petroleum odors were noted.
 - Department required a copy of the pollution liability insurance; and
 - Copies of recent cathodic protection testing results.
 - MDE follow-up telephone conversation with the station operator revealed the following:
 - Proof of pollution insurance to be submitted by 08/22/05;
 - Annual groundwater testing has not been conducted since 08/28/03;
 - Veeder Root TLS 250 has not been working since 08/28/03, so no release detection is present;
 - Daily stick readings are compared to conversion with daily printouts,
 - Inventory control is accomplished by the verifone daily and monthly printouts; and
 - There are no records of cathodic protection testing.
- August 22, 2005. MDE-OCP received notification from the station owner that the pollution insurance had lapsed. Station owner indicated that this issue would be rectified immediately.

- September 8, 2005. MDE-OCP received a signed copy of a sale agreement executed on 07/25/02 between facility owner (Mr. A. Kazemzadeh and Ms. Jennifer. Kazemzadeh) and a property owner (Mr. Edward Walker) for the purchase of the property.
- September 30, 2005. MDE-OCP telephone conversation with the owner of the UST systems, Mr. Kazemzadeh.
- October 3, 2005. MDE-OCP received proof of pollution insurance.
- October 7, 2005. MDE-OCP issued *Notice of Violation NV-2006-009* to Mr. P. McHugh (facility lessee/operator), and *Notice of Violation NV-2006-010* to Mr. A. Kazemzadeh (facility owner), requiring the following:
 - Cease and desist all deliveries to and sales of product from the UST system until all corrective actions in this notice have been satisfied.
 - Begin daily reconciliation of liquid levels in the four on-site UST systems;
 - Provide a means of required leak detection;
 - Conduct an enhanced leak detection (helium) test on the gasoline UST systems;
 - Conduct hydrostatic testing of all spill catch basins and containment sumps;
 - Provide proof of pollution liability insurance;
 - Inspect and furnish copies of inspection of the Cathodic Protection system;
 - Submit a copy of the last precision tightness test results for the piping;
 - Submit copies of the last annual test on the pressure drop line leak detectors;
 - Install spill catchment basins at the Stage I vapor recovery fittings;
 - Replace the worn hose on the diesel dispenser;
 - Sample the site drinking water supply well;
 - Sample and analyze water from the four existing tank field monitoring pipes; and
 - Submit documentation of the installation of three groundwater monitoring wells.
- October 11, 2005. MDE-OCP received letter from the facility owner (Mr. A. Kazemzadeh), indicating a willingness to work with the Department and a request for a 30-day extension to complete the required corrections.
- October 12, 2005. MDE-OCP telephone conversation with the facility owner (Mr. A. Kazemzadeh), discussing the requirements of *NV-2006-010*.
- October 17, 2005. MDE-OCP telephone conversation with the facility owner (Mr. A. Kazemzadeh), noting that an extension will not be granted for this location until compliance has been achieved at the station.
- October 17, 2005. MDE-OCP letter notifying Ewing Oil Company, Inc. (the supply company) that enforcement action has been initiated against Myersville BP/Amoco and AKJK LLC. All deliveries to the site are to cease and desist until all corrective actions required in *Notice of Violation NV-2006-009* and *NV-2006-010* have been completed to the Department's satisfaction.
- October 18, 2005. MDE-OCP received the following from the facility owner;
 - An amended registration form denoting AK&K LLC., as the registered owner of the UST Systems, with Mr. A. Kazemzadeh as the contact; and
 - Passing results for the cathodic protection system.
- October 21, 2005. MDE-OCP received confirmation from facility owner (Mr. A. Kazemzadeh), that groundwater samples were collected from on 10/19/05 and required UST testing conducted on 10/17/05:
 - Four (4) tank field observation pipe
 - On-site drinking water supply well.
 - Piping precision tightness test – *Pass 10/17/05*;
 - Pressure Decay Log – *Failed 10/17/05*; repaired and retested *pass*
 - Air to liquid testing – Dispensers 1 & 2 – *pass*; Dispensers 3 & 4 – *fail*; repaired and retested - *pass*
 - Annual test on the pressure drop line leak detectors – *Pass*

- Tank tightness tests – all *pass*
 - Spill bucket and containment sump testing – *all pass*
 - Helium test - *pass*
- October 24, 2005. MDE-OCP received notification from Ewing Oil (the supplier) that the last delivery to Myersville Amoco/BP was on October 22, 2005. Based upon information received MDE-OCP approved product deliveries to resume at this location.
 - October 27, 2005. MDE received a faxed copy of the insurance policy issued by Inner Harbor Insurance which included the fourth UST. Policy valid from June 27, 2005 to June 27, 2006. Pollution liability insurance policy for AKJK LLC (facility owner of the tanks).
 - November 22, 2005. MDE-OCP received groundwater and drinking water samples results collected 10/24/05. (*See table for results*).
 - December 1, 2005. MDE-OCP received via fax inventory records for all USTs -August 2005 to December 2005.
 - July 21, 2006. MDE-OCP received via fax copies of the following:
 - Piping precision tightness test – *Pass 10/17/05*;
 - Pressure Decay Log – *Failed 10/17/05*; repaired and retested *pass*
 - Air to liquid testing – Dispensers 1 & 2 – *pass*; Dispensers 3 & 4 – *fail*; repaired and retested - *pass*
 - Annual test on the pressure drop line leak detectors – *Pass*
 - Tank tightness tests – all *pass*
 - Spill bucket and containment sump testing – *all pass*
 - Helium test - *pass*
 - August 10, 2006. MDE-OCP met on-site with the station operator to discuss outstanding site requirements:
 - Installation of three groundwater monitoring wells outside the UST field;
 - Release detection - Mid and premium gasoline grades have insufficient levels of fuel to conduct the leak test;
 - Cathodic protection test results are outdated; and
 - The amended registration is inaccurate.
 - August 25, 2006. MDE-OCP received via fax passing cathodic protection testing results for tests conducted on 10/27/05.
 - August 25, 2006. MDE-OCP fax to the facility owner (Mr. A. Kazemzadeh) and the facility operator (Mr. P. McHugh), citing the Code of Maryland Regulations for temporarily closed UST systems.
 - September 22, 2006. MDE-OCP received notification from the owner that the cathodic protection testing has been completed and the UST registration has been amended.
 - September 25, 2006. MDE-OCP received telephone confirmation that the monitoring wells are scheduled for installation for 9/27/06.
 - September 27, 2006. MDE-OCP received telephone confirmation that the automatic tank gauging system has been updated to test the USTs every two weeks.
 - October 30, 2006. MDE-OCP received a *Subsurface Investigation Work Plan – October 25, 2006*, proposing the installation of three 2 inch groundwater monitoring points.
 - November 2, 2006. MDE-OCP directive letter approving the *Subsurface Investigation Work Plan – October 25, 2006*, contingent upon the following modifications:
 - All monitoring points must be 4 inches in diameter;
 - Sample all existing monitoring wells and tank field monitoring pipes;

- Survey all wells and determine groundwater directional flow;
 - Sample the influent, mid, and effluent water from the potable well water treatment system; and
- November 12, 2006. MDE-OCP received notification of scheduled well installation on November 16, 2006.
 - November 14, 2006. MDE- Attorney General's (AG) Office filed a Civil Action with *Complaint for Civil Penalty and Injunctive Relief* in the Circuit Court for Frederick County. *Complaint for Civil Penalty and Injunctive Relief* filed against the facility owner doing business under several entities (AKJK LLC; Mr. Ali. Kazemzadeh; Ms. Jennifer Kazemzadeh) and the facility operator (Mr. Patrick McHugh).
 - Correct all UST operational violations;
 - Install and sample three additional monitoring wells;
 - Maintain an activated carbon filtration unit of the station's potable well and sample monthly;
 - Conduct a detailed site assessment of the property
 - Submit a corrective action plan to mitigate petroleum releases to the groundwater.
 - December 15, 2006. MDE-OCP received *Phase II Subsurface Investigation – December 8, 2006*.
 - Well survey identified several nearby private drinking water wells.
 - Overland flow is south to southwesterly towards the surface water bodies.
 - The nearest surface water body is Grindstone Run and Catoctin Creek.
 - Depth to groundwater ranges from 7.32 to 14.38 ft
 - Groundwater gradient 0.056feet/foot to 0.038feet/foot.
 - Groundwater flow direction is to the south
 - MW1 thru MW3 installed (*See table for sampling results*).
 - January thru June 2007. MDE received Drinking water sampling results (*See table for results*).
 - January 17, 2007. MDE-OCP received *Monthly Potable Well Sampling - December 2006*.
 - January 30, 2007. MDE-OCP received *Monthly Potable Well Sampling -January 2007*.
 - March 2, 2007. MDE-OCP received *Monthly Potable Well Sampling -February 2007*.
 - April 8, 2007. MDE-OCP received *Monthly Potable Well Sampling - March 2007*.
 - June 5, 2007. MDE-OCP received *Monthly Potable Well Sampling - April 2007*
 - June 18, 2007. MDE-OCP received *Quarterly Monitoring Well Sampling – June 15, 2007. (See table for results)*.
 - June 22, 2007. MDE-OCP mailed informational letters to approximately twenty (20) property owners located within ¼ mile radius of the facility. The letters notified adjacent property owners of historic releases at the facility and continued MDE-OCP/FCHD oversight of groundwater monitoring in the area.
 - June thru July 2007. MDE-OCP received Drinking water sampling results (*See table for results*).
 - July 6, 2007. MDE-OCP received *Monthly Potable Well Sampling - June 2007*.
 - July 30, 2007. MDE-OCP received *Monthly Potable Well Sampling - July 2007*.
 - August 22, 2007. MDE-OCP letter to the Circuit Court regarding modifications to *Civil Action No. 10-C-002001OC*.
 - Stipulations of dismissal for Ms. Jennifer Kazemzadeh
 - Stipulations of dismissal without prejudice for the facility operator (Mr. Patrick McHugh).
 - Consent Decree will be between MDE and the facility owner (AKJK LLC; Mr. Ali. Kazemzadeh)
 - Amended Consent Decree ratified by an attorney representing (AKJK LLC; Mr. Ali. Kazemzadeh; Ms. Jennifer Kazemzadeh) and the MD-AGs Office.
 - October 5, 2007. A *Third Party Compliance* inspection conducted on September 5, 2007 pursuant to the Consent Decree.
 - September 12, 2007. MDE-OCP received *Monthly Potable Well Sampling - August 2007. (See table for results)*.

- September 18, 2007. MDE-AG's Office received the ratified Civil Action No. 10-C-06-0020001OC – *Consent Decree* signed by the Circuit Court Judge on September 13, 2007. Signatories included the facility owner doing business under several entities (AKJK LLC; Mr. Ali. Kazemzadeh ;) and attorney representing (AKJK LLC; Mr. Ali. Kazemzadeh; Ms. Jennifer Kazemzadeh) and the MD-AGs.
- October 30, 2007. MDE-OCP issued a *Notice to Correct UST Deficiencies* letter to AKJK LLC (facility owner –Mr. A. Kazemzadeh), based on a review of the *Third Party Inspection*- completed on 09/05/07 (Report received October 5, 2007).
- November 9, 2007. MDE-OCP received *Monthly Potable Well Sampling - October 2007. (See table for results).*
- November 16, 2007. MDE received a ratified copy of the *Consent Order* against POSM, L.L.C. t/a Myersville BP Amoco (Mr. McHugh – facility operator) requiring the operational compliance of the UST system..
- December 6, 2007. MDE-OCP received *Repairs made in response to the UST inspection Facility 1139 – Myersville BP – December 5, 2007.*
- December 7, 2007. MDE-OCP compliance assistance inspection in follow-up to the deficiencies identified during the *Third Party Inspection – June 28, 2007.* Continued deficiencies noted:
 - Leaking diesel dispenser to be repaired
 - Diesel hose to be protected from traffic
 - Kerosene dispenser has not been inspected
 - Provide verification that the risers are capped and not in contact with the manways
 - Provide verification that the flex connectors are not in contact with the soil
 - Spill buckets to be hydrostatically tested
 - Provide Stage I hydrostatic test results
 - Provide annual line tightness testing for 2007
 - Provide Helium Testing for 2007
 - Verify that the proper ATG tank chart and gauge stick are on site.
 - Verify that the ATG has been properly calibrated
- January 14, 2008. MDE-OCP received *Monthly Potable Well Sampling – January 2008. (See table for results).*
- January 9, 2008. MDE-OCP site visit to collect drinking water well samples pre-, mid- and post-filter. It was noted that MW-3 has been lost and not accessible for sampling.
- January 14, 2008. MDE-OCP received *Quarterly Monitoring Well Sampling – January 11, 2008. (See table for results).*
- February 11, 2008. MDE-OCP compliance assistance inspection in follow-up to the 12-07-07 inspection. The following failing deficiencies were noted:
 - Leaking diesel dispenser to be repaired
 - Diesel hose to be protected from traffic
 - Spill buckets to be hydrostatically tested
 - Provide Stage I hydrostatic test results
 - Provide annual line tightness testing for 2007
 - Provide Helium Testing for 2007
 - Verify that the ATG has been properly calibrated
- February 12, 2008. MDE-OCP letter to Mr. Kazemzadeh (facility owner) regarding the drinking water sample results collected on 01/09/08. *(See table for results).*
- March 4, 2008. MDE-OCP compliance assistance inspection in follow-up to the 02/11/08 inspection. The following failing deficiencies were noted:

- Provide verification that the risers are capped and not in contact with the manways
 - Provide verification that the flex connectors are not in contact with the soil
 - Spill buckets to be hydrostatically tested
 - Provide Stage I hydrostatic test results
 - Verify that the ATG has been properly calibrated
- March 11, 2008. MDE-OCP received *Monthly Potable Well Sampling – February 2008. (See table for results).*
 - April 4, 2008. MDE-OCP received ATG testing history showing PASSING results as of 03/07/08.
 - April 10, 2008. MDE-OCP received verification that :
 - The tank risers are not in contact with the lids;
 - The ATG electrical connections are not in contact this the lids; and
 - The flex connectors are not in contact with the soils.
 - April 15, 2008. MDE-OCP received *Quarterly Monitoring Well Sampling – April 9, 2007. (See table for results).*
 - April 23, 2008. MDE-OCP site visit to inspect SIR monthly reconciliation reports.
 - April 25, 2008. MDE-OCP compliance assistance inspection in follow-up to the 03/04/08 inspection. The following failing deficiencies were noted as corrected and passing:
 - Confirmation of UST liability insurance received.
 - The owner has now properly registered the USTs.
 - Cathodic protection testing records have been reviewed.
 - Line tightness testing information has been reviewed.
 - Spillage clean-up around dispenser islands
 - Proper inventory reconciliation now being preformed.
 - Method of tank release detection confirmed
 - Automatic line leak detector testing record provided.
 - May 9, 2008. MDE-OCP received *Monthly Potable Well Sampling-April 2008 – May 7, 2008. (See table for results).*
 - May 12, 2008. MDE-OCP site visit to conduct an area reconnaissance and to select off-site drinking water wells for future sampling.
 - May 13, 2008. MDE-OCP conducted a review of all documents received in follow-up to the September 5, 2008 Third Party Compliance inspection – all PASS.
 - May 14, 2008. MDE-OCP received the SIR monthly evaluation report – all PASS.
 - June 26, 2008. MDE-OCP received the *High Risk Groundwater Use Area* survey form.
 - July 1, 2008. MDE-OCP issued *Request for Monitoring Well and Off-site Sampling Data* directive letter requiring:
 - Quarterly sampling of all on-site monitoring wells and tank field monitoring pipes.
 - Quarterly sampling of the on-site drinking water well.
 - Submit a ½ mile radius well survey.
 - Conduct off-site drinking water sampling.
 - Submit a *Water Well Sampling Access* letter to the MDE-OCP for prior approval.
 - July 11, 2008. US EPA Region III notified MDE-OCP of their intent to pursue administrative penalties against AKJK, LLC (facility owner).

- August 20, 2008. MDE-OCP received, via email, the *Water Well Sampling Access – August 12, 2008* letter. MDE-OCP approved the letter, with modifications.
- August 27, 2008. MDE-OCP received via e-mail, notification that an attorney representing impacted property owners (12406 Stottlemeyer Road, 12416 Stottlemeyer Road, and 12408 Stottlemeyer Road) had filed acclaim against the State’s Treasury Office. Letter from the attorney to The State’s Treasury Office dated 07/19/08.
- August 29, 2008. MDE-OCP determined that *Third Party Compliance Inspection* was complete and UST systems are compliant.
- September 2, 2008. MDE received e-mail notification from consultant two of the access letters mailed to residents were returned. Field reconnaissance to be conducted to follow-up on the two outstanding access letters for sampling.
- September 5, 2008. MDE received a request for extension to complete the off-site sampling.
- September 17, 2008. MDE received *Quarterly Monitoring Well Sampling and Site Update – September 15, 2008*.
 - MW-3 was replaced with a newly drilled monitoring well.
 - Quarterly samples were collected from the five monitoring wells and two tank field pipes (*see table*)
 - A ½ mile radius well survey was conducted. Twenty-three (23) drinking water wells were documented within the ½ mile.
 - Off-site samples were collected from two of the four required locations (*see table*). The two outstanding property owners have not responded to the request to sample.
- November 11, 2008. Site visit to Alban Tractor and verified that bottled water is being provided prior to the installation of a granular activated carbon system (GAC).
- November 25, 2008. MDE-OCP issued request to sample letters to 9419 and 9434 Myersville Road, Myersville.
- December, 30, 2008. MDE-OCP site visit at the Alban Tractor Company 9460 Myersville Road confirms that a (GAC) system has been installed on the on-site drinking water wells.
- January 15, 2009. MDE-OCP received *Alban Tractor Sampling Results- January 6, 2009. (See Table)*
- January 15, 2009. MDE-OCP received *Quarterly Monitoring Well Sampling –January 9, 2009*.
 - Quarterly samples were collected from the five monitoring wells and two tank field pipes (*see table*)
 - Quarterly samples were collected from the on-site drinking water well (see table).
- January 28, 2009. MDE-OCP received *Alban Tractor Sampling Results- January 19, 2009. (See Table)*
- February 6, 2009. MDE-OCP received *Alban Tractor Sampling Results- February 2, 2009. (See Table)*
- March 4, 2009. MDE-OCP received *Quarterly Monitoring Well Sampling –March 2, 2009*.
 - Quarterly samples were collected from the five monitoring wells and two tank field pipes (*see table*)
 - Quarterly samples were collected from the on-site drinking water well (see table).

Future Updates:

- Future updates on this case investigation will be posted at www.mde.state.md.us [at the MDE home page, (select) Land, (select) Program (select) Oil Control, (select) Remediation Sites].

Contacts:

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- Frederick County Health Department (FCHD) 301-600-1715

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.

Groundwater Sample Results at the Myersville Amoco/BP at 9486 Myersville Road in Myersville, Frederick County

Sample Locations	Sampling Date	Benzene <i>MCL – 5 ppb</i>	MTBE <i>Action Level – 20 ppb</i>	Tertiary butyl alcohol (TBA) - an unregulated comp.	Other Petroleum Constituents of Concern <i>TPH – GRO – Action Level 47 ppb</i> <i>TPH-DRO – Action Level 47 ppb</i> <i>Tertiary amyl methyl ether (TAME) – unregulated comp.</i> <i>Di-isopropylether (DIPE) - unregulated comp.</i> <i>Naphthalene – Action Level 10 ppb</i> <i>Trichloroethene – MCL at 5 ppb</i>
Monitoring Wells					
EMW-1 (formerly MW1) (Installed 01/1985) Total Depth - unknown	10/29/01	11	905	1210	ND
	11/28/06	6.9	10,500	ND	DIPE – 180; TAME – 65
	06/04/07	14	8,000	ND	DIPE – 410
	12/31/07	9.3	1,400	ND	DIPE – 111
	03/25/08	Not Sampled	Not Sampled	Not Sampled	Not Sampled
	08/28/08	8.6	2,800	ND	DIPE – 60; Naphthalene - 27
	11/12/08	ND	5,500	ND	DIPE – 240; Naphthalene - 37
	02/20/09	ND	4,400	ND	Dipe – 150; TAME – 60
EMW-2 (formerly MW2) (installed 01/1985) Total Depth – unknown	10/29/01	104	179	ND	ND
	11/28/06	340	25000	ND	DIPE – 230; TAME – 150; Naphthalene – 45 ppb
	06/04/07	Not Sampled	Not Sampled	Not Sampled	Not Sampled
	12/31/07	Not Sampled	Not Sampled	Not Sampled	Not Sampled
	03/25/08	130	990	ND	DIPE – 560; Naphthalene – 76 ppb
	08/28/08	100	2,100	ND	Naphthalene – 100
	11/12/08	160	9,700	ND	DIPE – 170; Naphthalene - 810
	02/20/09	66	2,300	ND	Naphthalene - 140
MW-1 (Installed 11/16/06) Total Depth – 25.8 feet	11/28/06	ND	12	ND	ND
	06/04/07	ND	ND	ND	Trichloroethene - 20 ppb
	12/31/07	ND	ND	ND	ND
	03/25/08	ND	ND	ND	ND
	08/28/08	ND	ND	ND	ND
	11/12/08	ND	ND	ND	ND
	02/20/09	ND	ND	ND	ND
	MW-2 (Installed 11/16/06) Total Depth – 30.2 feet	11/28/06	ND	ND	ND
06/04/07		ND	ND	ND	ND
12/31/07		ND	ND	ND	ND
03/25/08		ND	ND	ND	ND
08/28/08		ND	ND	ND	ND
11/12/08		ND	7.5	ND	ND
02/20/09		ND	ND	ND	ND
MW-3 (Installed 11/16/06) Total Depth – 29.79 feet		11/28/06	200	7300	ND
	06/04/07	Not locatable	Not locatable	Not locatable	Not locatable - Gavel fill overlaid this well, not sampled
	12/31/07	Not locatable	Not locatable	Not locatable	Not locatable - Gavel fill overlaid this well, not sampled
	03/25/08	Not locatable	Not locatable	Not locatable	Not locatable - Gavel fill overlaid this well, not sampled
Replacement MW-3 (Installed 08/20/08) Need Log	08/28/08	ND	5,800	ND	DIPE – 220
	11/12/08	ND	380	ND	DIPE – 42
	02/20/09	92	1,200	ND	Naphthalene – 15

Sample Locations	Sampling Date	Benzene MCL – 5 ppb	MTBE Action Level – 20 ppb	Tertiary butyl alcohol (TBA) - an unregulated comp.	Other Petroleum Constituents of Concern TPH – GRO – Action Level 47 ppb TPH-DRO – Action Level 47 ppb Tertiary amyl methyl ether (TAME) – unregulated comp. Di-isopropylether (DIPE) - unregulated comp. Naphthalene – Action Level 10 ppb Trichloroethene – MCL at 5 ppb
Tank Field Observation Pipes					
TP – NE	10/19/05	DRY	DRY	DRY	DRY
	06/04/07	DRY	DRY	DRY	DRY
	12/31/07	DRY	DRY	DRY	DRY
	03/25/08	DRY	DRY	DRY	DRY
TP – SE	10/19/05	DRY	DRY	DRY	DRY
	06/04/07	DRY	DRY	DRY	DRY
	12/31/07	DRY	DRY	DRY	DRY
	03/25/08	DRY	DRY	DRY	DRY
TP – SW	10/19/05	30.45	79.94	113,710	TPH-GRO – 278,650; TPH-DRO – 3,654
	11/28/06	1000	13500	ND	DIPE – 220 ; Naphthalene – 20; Toluene – 1,700 ppb
	06/04/07	Not Sampled	Not Sampled	Not Sampled	Not Sampled
	12/31/07	Not Sampled	Not Sampled	Not Sampled	Not Sampled
	03/25/08	Not Sampled	Not Sampled	Not Sampled	Not Sampled
TP – NW	10/19/05	ND	116	103,090	TPH-GRO – 324,430; TPH-DRO – 2,000
	11/28/06	DRY	DRY	DRY	DRY
	06/04/07	Not Sampled	Not Sampled	Not Sampled	Not Sampled
	12/31/07	Not Sampled	Not Sampled	Not Sampled	Not Sampled
	03/25/08	Not Sampled	Not Sampled	Not Sampled	Not Sampled

**Drinking Water Sampling results collected from the Station's Supply Well at Myersville Amoco/BP at 9486
Myersville Road in Myersville, Frederick County**

Sample location	Sample dates	Petroleum Constituents of Concern	
		MTBE (20 ppb – action level)	Other petroleum constituents
Transient Non-Community Supply Well			
Myersville Amoco/BP at 9486 Myersville Road GAC installed by facility owner in 2006	10/29/01	49	ND
	02/08/02	ND	ND
	10/19/05	73	ND
	11/28/06	Pre-filter – 38 Mid-filter – 20 After-filter – 11	ND
	12/26/06	Pre filter – ND Mid –filter – ND After- filter – ND	ND
	01/25/07	Pre-filter – ND Mid-filter – ND After-filter – ND	ND
	02/19/07	Pre-filter – ND Mid-filter – ND After-filter – ND	ND
	03/27/07	Pre-filter – ND Mid-filter – ND After-filter – ND	ND
	04/27/07	Pre-filter – ND Mid-filter – ND After-filter – ND	ND
	06/28/07	Pre-filter – ND Mid-filter – ND After-filter – ND	ND
	07/18/07	Pre-filter – ND Mid-filter – ND After-filter – ND	ND
	08/31/07	Pre-filter – ND Mid-filter – ND After-filter – ND	ND
	10/29/07	Pre-filter – ND Mid-filter – ND After-filter – ND	ND
	11/29/07	Pre-filter – ND Mid-filter – ND After-filter – ND	ND
	01/01/08	Pre-filter – ND Mid-filter – ND After-filter – ND	ND
	01/09/08	Pre-filter – ND Mid-filter – ND After-filter – ND	Toluene 0.66 ppb – mid Toluene 0.67 ppb – post
	02/27/08	Pre-filter – ND Mid-filter – ND After-filter – ND	ND
	03/25/08	Pre-filter – ND Mid-filter – ND After-filter – ND	ND
	04/21/08	Pre-filter – ND Mid-filter – ND After-filter – ND	ND
	08/28/08	Pre-filter – ND Mid-filter – ND After-filter – ND	ND
11/12/08	Pre-filter – ND Mid-filter – ND After-filter – ND	ND	
02/20/09	Pre-filter – ND Mid-filter – ND After-filter – ND	ND	

9460 Myersville Road (well 1) <i>GAC installed</i>	09/03/08	380	DIPE – 3.6
9460 Myersville Road (well 2) <i>GAC installed</i>	09/03/08	83	DIPE – 2.5
3001 Ventrice Court	09/03/08	7.8	ND
Alban Tractor Company 9640 Myersville Road GAC installed by owner in 2008	1/6/09	Pre-filter – 182.2 ppb Mid-filter – ND After-filter – 176.4	
	1/19/09	Pre-filter-277.8 Mid-filter-1.2 Post-filter-ND	
	2/02/09	Pre-filter-265.0 Mid-filter-1.4 Post-filter-ND	
	0/3/03/09	Pre-filter-296.0 Mid-filter-3.9 Post-filter-ND	