

MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard ● Baltimore Maryland 21230-1719

1-800-633-6101 ● <http://www.mde.state.md.us>

**Environmental Investigation
Former Paul Dunlap Property
2620 Dublin Road, Street MD 21154
Harford County, Maryland
Case No. 1990-2397-HA**

The Maryland Department of the Environment (MDE), Oil Control Program (OCP) is evaluating the impact of petroleum constituents identified on the former Dunlap property following the removal of a 1,000-gallon and three (3) 550-gallon gasoline underground storage tanks (USTs) in May 1990. Eighteen tons of contaminated soil was also removed. Contaminated soil was also discovered under the foundation of the building, but could not be removed. Two groundwater-monitoring wells were subsequently installed and further environmental investigation to assess the potential for off-site migration was conducted. The drinking water supply well on-site and on neighboring properties have not been impacted.

On August 17, 1983, the former Dunlap property was sold. There are tenants currently occupy the property. Paul Dunlap, the responsible party, passed away, leaving the State with no other viable responsible party for this case. As such, this case is being evaluated under the State Lead Program.

Chronology

- May 23, 1990. MDE-OCP site visit to witness the removal of a 1,000-gallon and three (3) 550-gallon gasoline underground storage tanks. The tanks had been out-of-service for eight (8) years.
 - No perforations in the 1,000-gallon tank.
 - Perforations identified in all three 550-gallon tanks.
 - Eighteen (18) tons of petroleum-impacted soil was removed.
 - Contaminated soil extended under the foundation of the building and could not be removed.
 - MDE-OCP required the installation of a monitoring well.
- July 16, 1990. MDE-OCP received a HCHD letter dated 1/13/1990, requesting assistance in the investigation of the LUST contamination at the Dunlap property.
 - A drinking water sample was collected from the existing potable well on June 7, 1990.
 - DW on-site non-detect for petroleum constituents (ND).
 - Future development in the area surrounding the property was underway, and HCHD wanted to ensure protection from off-site contamination.
- October 9, 1990. MDE-OCP received *Well Sampling Report – October 5, 1990*.
 - At the time of tank removal, contaminated soil was removed. However, it was found that contaminated soils also extended under the foundation of the building, which could not be removed.
 - A monitoring well was installed within the former UST field.
 - Sampling event September 24, 1990.
 - DW at 2613 Dublin Road Non-detect for petroleum constituents.
 - MW (Ha-88-88-1160) Benzene - 2250 ppb; toluene - 1180 ppb; ethylbenzene - 2440 ppb; Naphthalene - 408 ppb
- December 13, 1990. MDE-OCP received HCHD letter dated 01/13/90 to Mr. Dunlap's attorney concerning the proposed *Environmental Assessment* for the USTs on the property at 2620 Dublin Road. HCHD provided comments and questions, concerning the potential for off-site migration.

- December 17, 1990. MDE-OCP received notice from Mr. Dunlap's consultant that a soil gas survey would occur on 11/12/1990. The purpose of the survey was to determine the extent of soil contamination under the building.
- January 25, 1991. MDE-OCP received HCHD letter dated 1/24/1991 requesting a review of the *Environmental Assessment – January 1991*. Several enclosures were included.
 - Letter from Mr. Dunlap's attorney dated 01/17/91 to HCHD requesting a meeting to discuss the situation, since a private drinking water well was identified on the neighboring Barringer property.
 - Soil-Gas survey was performed to determine how far the contamination plume extends.
 - Plume appears to be migrating in a southeasterly direction, but also appears to be very limited.
 - Supply well at 2613 Dublin Road - 350ft. away, appears to be down gradient; grouted to 85ft.
 - Supply well at 2621 Dublin Road - 300ft away; grouted to 70ft.
 - On-site monitoring well sampled on December 26, 1990
 - MW1 Benzene - 1780 ppb; toluene - 1150 ppb; ethylbenzene - 2760 ppb; naphthalene - 542 ppb
- February 1, 1991. MDE Review of the *Environmental Assessment*.
 - Groundwater flow appears to be to the southeast.
 - Given the age of the spill and the tanks, the report concluded that a small plume had migrated very little.
 - The Dept. recommended sampling on a regular basis.
- February 6, 1991. MDE-OCP received the 02/04/91 letter from Mr. Charles Burman (the new property owner).
- February 26, 1991. MDE-OCP letter to Mr. Dunlap's attorney based on a review of the *Environmental Assessment – January 1991*, MDE would require:
 - Install an additional monitoring well southeast of the existing monitoring well.
 - Sample both monitoring wells for BTEX and submit results to MDE-OCP.
- April 11, 1991. MDE-OCP received Maryland Department of Transportation (MDOT) letter dated 01/05/91 to Mr. Dunlap's attorney regarding access to install a monitoring well in a public right-of- way.
 - MDOT will not grant access to install a monitoring well, because it may introduce contaminants into the soil and groundwater; the area may be needed for road widening or resurfacing; and, the monitoring well may be there indefinitely.
- April 12, 1991. MDE-OCP received a letter from Mr. Dunlaps' attorney dated 04/10/91, requesting assistance in gaining permission to drill a monitoring well in a public right-of-way.
- April 18, 1991. MDE-OCP site visit to select the location of the second monitoring well.
- April 24, 1991. MDE-OCP received HCHD letter dated 04/24/91 to Mr. Barringer, explaining that HCHD has not placed a moratorium on well development and building on properties adjacent to 2620 Dublin Road. The zones are merely planning zones, and permits can be issued, as long as the applicant establishes that their proposal will not spread the existing contamination.
- May 7, 1991. MDE-OCP received sampling results conducted by HCHD on 05/06/91 for several off-site private wells:
 - 2628 Dublin Road and 2626 Dublin Road (they share the same well) - ND
 - 2616 Dublin Road - ND
 - 2630 Dublin Road - ND
 - 2605 Dublin Road - ND
 - 2605 Dublin Road (different parcel) - ND
 - 2606 Dublin Road - ND

- May 15, 1991. MDE-OCP received letter dated 5/12/91 and the *Monitoring Well Installation and Sampling Report – May 1991* from Mr. Dunlap’s attorney. The second monitoring well was installed and both monitoring wells were sampled.
 - Sampling event on 04/30/91.
 - MW1: Benzene - 1970 ppb; ethylbenzene - 2230 ppb; TPH - 31,100 ppb
 - MW2: Benzene - 27 ppb; TPH - 1550 ppb

- July 9 and November 29, 1991. MDE-OCP received letter dated 11/26/91 from Mr. Dunlap’s attorney, requesting the Department’s to review the *May 1991* report.

- December 6, 1991. MDE-OCP received a letter dated 12/4/91 from the current property owner’s attorney (i.e. Mr. Barringers), indicating that no sampling had been performed on the monitoring wells.

- March 12, 1992. MDE-OCP letter to Mr. Dunlap, requiring quarterly monitoring of the two (2) monitoring wells for one year. Samples must be analyzed for BTEX, and submitted to MDE.

- April 15, 1992. MDE-OCP received a letter dated 4/14/92 from Mr. Dunlap’s attorney with sampling results and a request that the site cleared of further liability.
 - *Monitoring Well Sampling Vicinity of Callico Cottage – March 18, 1992*
 - Sampling event on January 21, 1992.
 - MW1 (sheen observed during purging) :
Benzene - 8,260 ppb; toluene - 6,524 ppb; ethylbenzene - 2,552 ppb
 - MW2 Benzene - 8.3 ppb

- May 5, 1992. MDE-OCP received a HCHD letter dated 04/30/92, to Mr. Dunlap’s attorney.
 - Based on soil and groundwater sampling results the site will continue to be monitored by for the potential off-site migration. Therefore, HCHD may continue to take other enforcement action on the site and surrounding area.

- July 7, 1992. MDE-OCP received *Dunlop Monitoring Well Project Water Samples – June 17, 1992*.
 - Sampling event on June 15, 1992
 - MW1: Benzene - 3420 ppb; toluene 1110 ppb; ethylbenzene 2580 ppb; TPH 42,000 ppb
 - MW2: TPH - 1,400 ppb

- November 18, 1992. MDE-OCP received a letter dated 11/18/92 from Mr. Dunlap’s consultant concerning the likelihood of the case remaining in an “open” status, should the next sampling results indicate a downward trend. It was noted that Mr. Dunlap would like to develop the neighboring parcels of land.

- December 3, 1992. MDE-OCP received HCHD letters dated 12/02/92 to Mr. Dunlap’s consultant and 04/30/92 to Mr. Dunlap’s attorney.
 - HCHD reiterated that there is no building moratorium on the area, only that there will be conditions placed on permits.

- June 10, 1993. MDE-OCP received a letter dated 06/09/93 from HCHD requesting a copy of the latest groundwater report.

- August 9, 1993. MDE-OCP received *Monitoring Well Analysis and Sampling Report – August 4, 1993*.
 - January 20, 1993
 - MW1 Benzene - 3450 ppb; toluene -1020 ppb; ethylbenzene - 2120 ppb; naphthalene -419 ppb; TPH - 42,800 ppb
 - MW2: Benzene - 7 ppb; TPH - 576 ppb

- May 19, 1993
 - MW1 Benzene - 2720 ppb; ethylbenzene -2940 ppb; naphthalene -595 ppb; TPH - 44,300 ppb
 - MW2 TPH - 260 ppb
- March 13, 1995. MDE-OCP informed HCHD of the 01/18/95 sampling results.
 - MW1: Benzene - 1750 ppb; ethylbenzene - 2,000 ppb; naphthalene - 517 ppb
 - MW2: Naphthalene - 10.7 ppb
- July 22, 1998. MDE-OCP site visit to bail the monitoring wells.
 - MW1: After bailing, odor showed up. No sheen.
 - MW2: No odors, no sheen. <1ft of water.
- June 22, 2001. MDE-OCP reviewed the case and requested monitoring well sampling.
- December 5, 2001. MDE-OCP site visit to sample the monitoring wells, however only one could be located.
- December 11, 2001. MDE-OCP memo. One more attempt will be made to locate MW1. If it cannot be located, MW2 only will be sampled, and case evaluation will proceed from that sampling event.
- April 18, 2002. MDE-OCP received a letter dated 04/17/2002 from Tower Resource Management requesting information about the property at 2620 Dublin Road.
- April 24, 2002. MDE-OCP met with Tower Resource Management representative on-site to discuss the site history. Monitoring wells were also gauged.
 - MW1 ¼ inches of LPH floating on the surface of the water table. A wick was placed in the well.
 - MW2 No odors in well; water was clear and free of sheen.
- April 25, 2002. MDE-OCP received a fax from Tower Resource Management. Attached was a sketch of the property at 2620 Dublin Road, with the location of the monitoring wells marked.
- April 30, 2002. MDE-OCP faxed a copy of the deed and tax information for 2620 Dublin Road, to Tower Resource Management.
- June 13, 2002. MDE-OCP Site Status Letter to Tower Resource Management.
 - The case is still open. Four USTs were removed, and two monitoring wells installed.
 - The monitoring well adjacent to the tank field have shown impact.
- June 6, 2005. MDE-OCP site visit to locate the monitoring well. MW2 intact, MW1 could not be located.
- September 2, 2005. MDE-OCP site visit to check MW1. Water clear, no odor, evidence of biological activity.
- September 9, 2005. MDE-OCP site visit to check the wick in MW1.
 - MW1 Bottom 3 inches of the wick was saturated with LPH with traces up to 7 inches high on the wick. The wick was turned over and placed back in the monitoring well.
- September 21, 2005. MDE-OCP site visit to purge and sample the monitoring wells and the supply well.
 - MW1 purged and sheen appeared. A wick was left in the monitoring well. No sample was collected.
- October 12, 2005. MDE-OCP received results of 09/21/05 sampling event.
 - MW2: Non-detect for petroleum constituents (ND).
 - DW: ND

- October 27, 2005. MDE-OCP received HCHD letter dated 10/03/05 to County's Department of Planning and Zoning. Eight residential lots proposed for the site is adjacent to 2620 Dublin Road [located on the east side of Ady Road (MD Route 543) and the north side of Dublin Road (MD Route 440)].
 - HCHD did not approve the plan. The following requirements must be completed first:
 - Complete an *Environmental Assessment*. Drill test wells on Lots 7,12,13, and 14 and sample for full-suite volatile organic compounds. Evaluate risk for potential contaminant migration in the future.
 - Pump the existing septic system, and ensure that it meets current construction standards.
- October 27, 2005. MDE-OCP received a letter dated 10/26/05 from HCHD requesting an update on the case at 2620 Dublin Road, as they have had a request to develop the adjacent property.
- November 4, 2005. MDE-OCP informed Mr. Burman (current property owner), of the 09/21/05 sampling results. Continued monitoring of MW1 is required until LPH is no longer present.
- November 14, 2005. MDE-OCP site visit.
 - MW1 3 inches LPH on the wick. Water clear, with a slight film. Wick placed back in the well.
- November 18, 2005. MDE-OCP delivered a copy of the November 4, 2005 letter to the tenant at 2620 Dublin Road, as it was returned "NMR."
- December 1, 2005. MDE-OCP site visit to purge and sample MW1. A possible sheen was noted on the purge water. A new wick was placed in the monitoring well after sampling.
- December 20, 2005. MDE-OCP received the results of the 12/01/05 monitoring well sampling event.
 - MW1: Benzene - 142 ppb; naphthalene - 181 ppb
- January 20, 2006. MDE-OCP site visit.
 - MW1 6 inches of LPH on the wick. Wick placed back in the monitoring well.
- March 10, 2006. MDE-OCP site visit to sample MW1. The water table was lower, and the wick in the MW was dry. The monitoring well was purged and sampled. Wick placed back in the well.
- March 30, 2006. MDE-OCP received results of the 03/10/06 monitoring well sampling event.
 - MW1: Benzene - 215 ppb; naphthalene - 345 ppb
- December 4, 2006. MDE-OCP letter to several area residents, requesting permission to conduct follow-up sampling of drinking water supply wells as part of the Dublin area groundwater investigation.
- December 22, 2006. MDE-OCP sampled the drinking water supply wells at 2605 Dublin Road, 2613 Dublin Road, and the subject property (2620 Dublin Road).
- January 5, 2007. MDE-OCP received the results of the 12/22/06 sampling event for several off-site private wells.
 - 2605 Dublin Road: ND
 - 2613 Dublin Road: ND
 - 2620 Dublin Road: ND
- January 22, 2007. MDE-OCP letters to the property owners informing them of the sampling results.

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

- Maryland Department of the Environment (MDE): Oil Control Program: 410-537-3443
- Harford County Health Department (HCHD) : 443-643-0322 and 443-643-0307

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 guilt, involvement in a wrongful act or contribution to environmental damage.