



Facts About...

GRASONVILLE FOODMART
(Non-Master List Site)

Site Location and Description

Grasonville FoodMart (the "Site") is located in the southwestern portion of Anne Arundel County at 101 Drummer Drive in Grasonville, Maryland. The Site occupies approximately 0.6 acres of land in a mixed use commercial and residential area. The Site is bounded to the east by Evans Avenue, to the north by Drummer Drive, and to the west by Pine Drive. The Blue Star Memorial Highway (Route 50) is located approximately 300 feet north of the Site and the nearest significant body of surface water is Winchester Creek, located approximately 700 feet north of the Site. The Site is improved with a convenience store, Laundromat, gasoline pumping station structure, and associated parking and operational infrastructure.

Site History

The Grasonville FoodMart was constructed on the property at 101 Drummer Drive in Grasonville, Maryland in 1987. At this time, the site was improved with an active gasoline filling station, convenience store, and a Laundromat. The filling station utilized three 6,000-gallon gasoline underground storage tanks (USTs). The Laundromat contained an automated dry cleaning machine, which operated at the site for approximately five years (1987~1992). The automated dry cleaning machine sat idle in the Laundromat tenant space from 1992, when the machine was idled, until ~2007, when it was finally disconnected and removed from the site. In 1992, a release from the gasoline USTs was identified at the site during a routine compliance inspection. Laboratory analysis of samples collected from the UST monitoring wells at the site identified elevated concentrations of various gasoline constituents, as well as 160 parts per billion (ppb) of tetrachloroethane (PCE). The PCE concentrations were tracked and monitored under Maryland Department of the Environment (MDE) Oil Control Program (OCP) oversight until August 2005, when the OCP deferred oversight of the elevated PCE concentrations at the site to the MDE Controlled Hazardous Substance (CHS) Enforcement Division (the Division). The OCP Case for the Site was closed in September 2007.

Environmental Investigations and Actions

The Division informed the site owner and responsible party (RP) of the specific investigation into the elevated levels of PCE at the site in a letter dated October 2005. Between 2005 and 2009, the environmental consultant working for the RP and site owner performed a series of subsurface investigations and groundwater monitoring events which primarily utilized the existing groundwater monitoring well infrastructure from the petroleum contamination investigation for subsurface access. The monitoring and laboratory analytical data from these studies indicated that a plume of PCE extended from the Site, across Drummer Drive to the north, and onto the northerly adjoining Shore Shine Car Wash & Quick Lube property. The MDE noted that much of the laboratory analysis from these studies and investigations appeared somewhat erratic and inconsistent, leading the MDE to surmise that the petroleum investigation wells were not screened at a sufficient depth level to allow a proper representation of the PCE plume.

The Division conducted a follow-up subsurface investigation in March 2010 in order to address data gaps from the prior investigations at the site. This investigation involved the installation of a total of four new monitoring wells, including two wells on the Site and two on the northerly adjoining



car wash property. These wells were advanced between 20 and 24.5 feet below surface grade and were placed to best represent the subsurface conditions directly down-gradient of the Laundromat tenant space and the former location of the automated dry cleaning unit. Additionally, nine of the monitoring wells from the prior on-site investigations were sampled as part of the March 2010 investigation. These nine wells had each been advanced to a depth of 16 feet or more below surface grade. Laboratory analysis of groundwater samples collected from the new and previously existing wells confirmed the Division's suspicions that the PCE contamination at the Site and northerly adjoining car wash property had originated from a PCE release from the Laundromat tenant space at the site. Well GF-1, which the Division installed directly north and down-gradient from the suspected source area demonstrated the greatest concentration of PCE in groundwater at 2,360 ppb.

The combination of the data from the Division's March 2010 investigation with additional data from the historical investigations between 2005 and 2009 provided evidence of a plume of PCE extending from the Laundromat tenant at the Grasonville FoodMart property, across Drummer Drive, and onto the Shore Shine Car Wash property. The concentrations of PCE identified in this investigation were reviewed by the Division's risk assessor. It was determined that, based on the land use, use of municipal drinking water, the actual concentration of PCE in the affected area, and the removal of the suspected source of the contamination, the PCE concentrations underlying the Site and adjoining car wash property did not pose a primary exposure risk to occupants, tenants, or visitors of these properties. However, the risk assessor did determine that the permanent structures at the Site and car wash properties should be investigated for vapor intrusion risk.

In September 2010, the Division was informed via letter that the Site had been foreclosed upon and that Queenstown Bank of Maryland had assumed ownership of the site. In October 2010, the new Site owner commissioned an indoor air quality (IAQ) study for the on-site structure. At the time of this study, the building was shuttered and normal HVAC systems were not in operation. Three air sampling canisters were deployed during this study, with two being placed in the building interior and the remaining canister being placed outside of the structure to provide a background or baseline reading. The concentrations of PCE measured in the indoor air of the structure were determined by the Division's risk assessor to pose a potential risk to occupants of the structure. However, it was also determined that the samples were not representative of typical operating indoor air conditions. The risk assessor recommended that the Site ownership commission a subslab vapor study to obtain a better understanding of the actual vapor intrusion risk within the structure.

In December 2010, the site owner commissioned a subslab soil vapor analysis of the on-site building interior. This study identified elevated PCE concentrations in indoor air, particularly in the Laundromat tenant space. Two subslab sampling points were placed in the building, with one located in the convenience store portion of the building and the other in the Laundromat tenant space. The Division's risk assessor reviewed the PCE concentrations in indoor air from this study and determined that the PCE concentration in the building at the Site posed a risk to the occupants of the building. The Division recommended installation of a subslab ventilation/mitigation system to bring PCE concentrations in the building below risk thresholds.

Also in December 2010, the Division commissioned an IAQ study of the structure at the Shore Shine Car Wash & Quick Lube property. The Division's risk assessor determined that the indoor air concentrations of PCE identified at the car wash did not indicate a vapor intrusion-related health risk to the occupants of the car wash property.

On March 16, 2011, the Division commissioned the removal and proper closure of the four new wells installed during the Division's March 2010 subsurface investigation of the site. Additionally, nine drums of waste soil and groundwater generated during the installation of the four wells were removed from the Site by a licensed waste hauler.

Current Status

The Division is currently working with the current site owner to move the CHS Enforcement case associated with the site toward closure. The Division is requiring the installation and activation of an active and effective vapor mitigation system within the on-site building to address the elevated concentration of PCE, particularly in the Laundromat tenant space. Additionally, while no further monitoring or subsurface remediation is required at this time, the Division is requiring that a universal environmental covenant be established with the recorded deed for the property, which will prohibit the use of groundwater from beneath the site, restrict property use to non-residential purposes, and require that any renovation, rehabilitation, or redevelopment of that property anticipated to disturb the subslab and subsurface areas of the site be reported to the Division prior to their undertaking. Furthermore, the environmental consultant used by the prior site owner has been contacted and is making arrangements to remove the remaining monitoring wells at the site as stipulated in their contract with the prior Site owner's environmental insurance claim as part of the OCP investigation which had otherwise been close since 2007. Once the above tasks are completed, the Site will be granted case closed status from the CHS Enforcement Division..

Contact

For additional information, please contact the Land Restoration Program at (410) 537-3440.

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