

VAPOR INTRUSION INVESTIGATION

916 S. Main St., Eaton Rapids, Michigan

Site Updates and General Information

The Michigan Department of Environment, Great Lakes and Energy (EGLE), with the support of the Michigan Department of Health and Human Services (MDHHS) and the Barry Eaton District Health Department (BEDHD), is working to evaluate the risks associated with a historic chemical release from a drycleaner that formerly occupied 916 S. Main Street in Eaton Rapids, Michigan. The concern is that vapors from contaminated soils and ground water may migrate into structures within 100 feet of the extent of contamination. EGLE and its contractor are working to determine if any nearby properties are affected. Evaluation of the volatilization to indoor air pathway (VIAP), is also known as vapor intrusion.

What we know about vapor intrusion has increased over the years. The potential risks from chemicals that are linked to vapor intrusion are better understood today than in previous years. Vapor intrusion is a national problem, and state and federal agencies across the country are continuing to learn more about it.

SAMPLING CONDUCTED

EGLE is investigating contamination caused by release(s) that likely occurred in the 1970s and 1980s from a former dry cleaner of a chemical known as tetrachloroethylene (PCE). In the past, a private party and EGLE removed and treated grossly contaminated soils from outside and underneath the building. Risks from remaining PCE vapors at the former dry cleaner building are presently addressed by a sub-slab depressurization mitigation system. Historic chemical discharges from the former dry cleaner caused PCE to enter the shallow groundwater and spread over 750 feet to the northeast. This is also known as a groundwater contamination plume. Vapors from this groundwater contamination may pose an indoor air risk to buildings over or near it. This slowly moving groundwater contamination does not pose a risk to the City of Eaton Rapids municipal water supply because city water is drawn from deep wells over a mile from this groundwater contamination.

In order to determine if there is vapor intrusion risk to nearby properties, soil gas samples from soil gas wells and sub-slab sampling points are collected to evaluate PCE vapor intrusion risk to residences and businesses. EGLE previously collected soil gas samples from wells outside of residential and commercial structures over the seasons. The results indicated that evaluation of sub-slab soil gas inside structures and the collection of indoor air samples is necessary to fully evaluate vapor intrusion exposure risk to occupants of structures located over and near the slowly moving groundwater contamination. EGLE also determined that structures located north to northeast of the property should also be investigated for vapor intrusion risk because they are within 100 feet of known PCE soil and groundwater vapor sources. Evaluation of PCE vapor risks posed by the groundwater contamination where underground utilities intercept it is part of this investigation.

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EGLE, the MDHHS, and the BEDHD are now working to get permission from these property owners to collect samples. The sampling program began July 28, 2019 and will continue for over a year for properties at risk. If the sampling shows that vapor intrusion may be a problem, measures can be taken to control it. Property owners are encouraged to assist EGLE, MDHHS and BEDHD staff by granting access to their property if it is within the identified vapor risk investigation area.

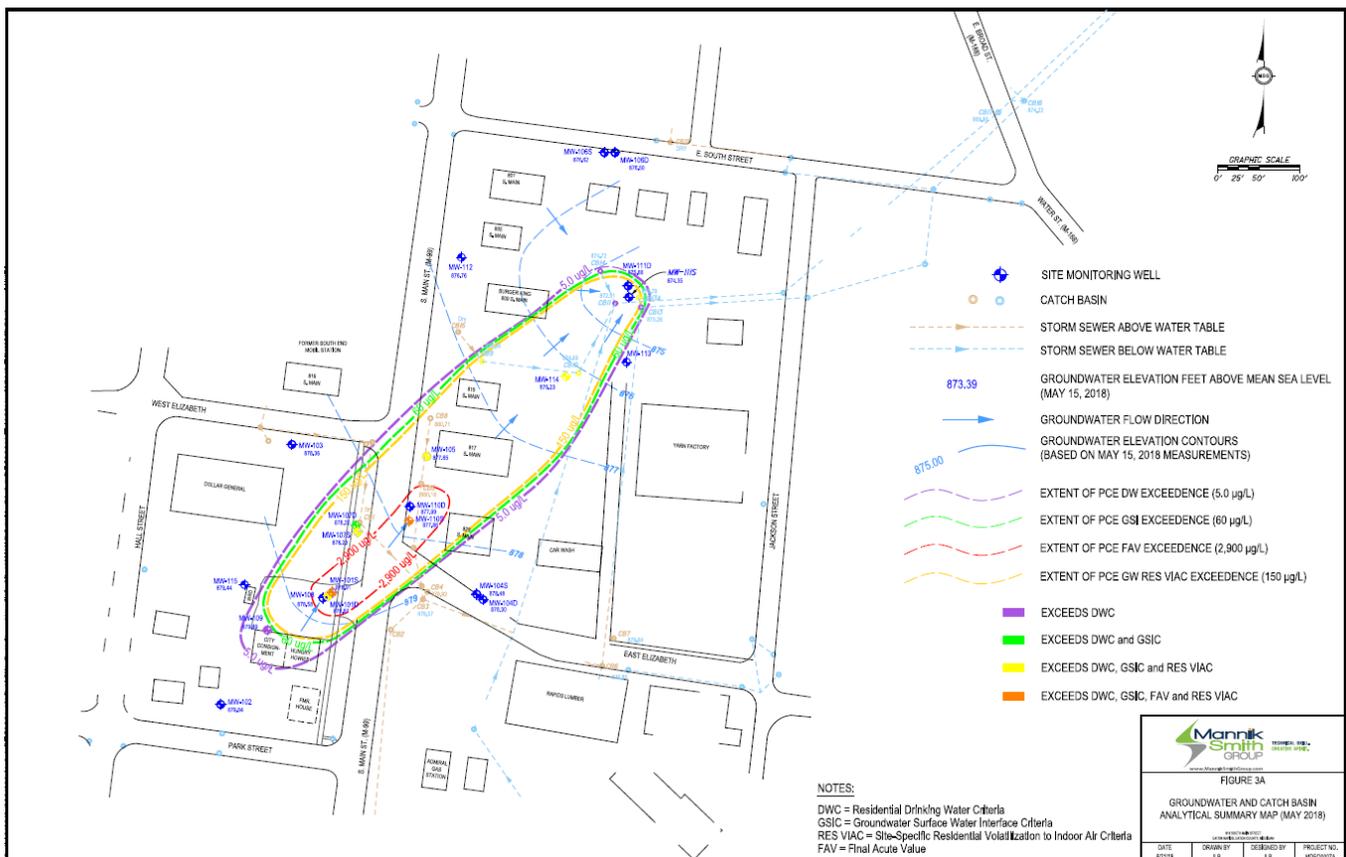
In July and August 2019 sub-slab soil gas and indoor air samples from apartments over the plume found PCE in the indoor air from sub-slab soil gas below action levels. Monitoring is in progress for the apartments. Permission is being sought to evaluate other properties over and near the plume.

The existing sub-slab depressurization vapor mitigation system at 916 S. Main is presently undergoing design enhancements to ensure that all accumulated PCE vapors under the floor are evacuated out the stack.

The map below indicates the general location of the migrating groundwater contamination plume. Mannik and Smith Group is the contractor hired by EGLE to evaluate the contamination.

Updates on the investigation will be provided to the City of Eaton Rapids, Barry-Eaton Health Department, Michigan Department of Human Health and Services and Direct Mail to owners and tenants at locations where vapor samples are collected.

Additional technical information available upon request. Contact Rebecca Taylor, EGLE Project Manager, at taylorr@michigan.gov or 517-284-5160.



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