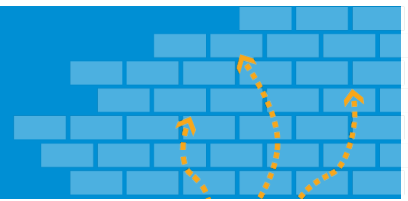


VAPOR INTRUSION INVESTIGATION

Diamond Chrome Plating, Howell, Michigan

PROJECT UPDATE



The Michigan Department of Environment, Great Lakes and Energy (EGLE), with the support of Michigan Department of Health and Human Services (MDHHS) and the Livingston County Health Department (LCHD), is evaluating exposure risks associated with historic and recent chemical releases of chemicals, including trichloroethylene (TCE), originating from the Diamond Chrome Plating (DCP) facility located at 604 South Michigan Avenue in Howell, Michigan. Groundwater contamination extends generally south of this property (see [Attachment 1 - Groundwater Plume Map](#).) TCE contaminated soil at various depths are shown on [Attachment 2](#), Figures 2, 3, 4. In addition to TCE, hexavalent chromium, per- and polyfluoroalkyl substances, cyanide, petroleum, and other plating related chemicals and their associated breakdown chemicals are contained in contaminated soil and groundwater. Recent developments concerning possible exposure related to the volatilization to indoor air pathway (vapor intrusion), has led EGLE to further evaluate soil gas (vapors) emanating from contaminated soil and groundwater.

In 2016 and 2017, DCP conducted initial soil gas investigations that included sampling from soil gas wells installed on and off the DCP property. Based upon the results from DCP's initial investigation, a workplan was developed to expand the sampling. In March 2019, DCP implemented the workplan that included quarterly sampling and the collection of soil gas and indoor air samples from under three homes located northeast of the DCP property. The results of the investigation consistently found TCE in the indoor air above recommended interim action screening levels. TCE was not found in soil below one of the three homes. Based upon initial indoor air results, DHHS and LCHD requested that DCP install and operate air purifying units in the three homes until the source of the vapors could be determined. DCP complied with this request.

In August 2019, DCP screened ambient air and vapors within storm and sanitary sewers from inside and outside of the DCP facility, including nearby residences and businesses using a portable TCE vapor detection device known as HAPSITE Smart Plus. This survey confirmed elevated levels of TCE vapors associated with the DCP property and DCP's use of TCE in its vapor degreaser. Based upon this information, a conclusion was reached that the ambient air emissions from the DCP plant were the probable source contributing to the indoor air concentrations detected in the three homes.

NEXT STEPS

On February 27, 2019, DCP submitted a Volatilization to Indoor Air Pathway Work Plan to evaluate structures within 100 feet of known vapor sources. Sampling and continued evaluation related to this work plan is ongoing. To date, data collected indicates the TCE vapors do not appear to be entering nearby homes or business at concentrations of concern. As more information becomes available, EGLE continues to evaluate available options to address DCP's TCE releases to soil and groundwater in partnership with DHHS and LCHD. Although DCP has discontinued its use of TCE in their vapor degreaser, sampling and continued evaluation related to this work plan is ongoing. As part of this ongoing evaluation, you may be asked for permission to enter your home, to evaluate if TCE or other chemical vapors may have reached your property. This will help to understand what additional actions, if any, should be taken to address this matter.

CONTACT INFORMATION:

TECHNICAL OR GENERAL QUESTIONS:

EGLE Lansing District Office

Rebecca Taylor

TaylorR@Michigan.gov | 517-284-5160

HEALTH-RELATED QUESTIONS:

Livingston County Health Department

Matt Bolang

MBolang@livgov.com | 517-546-9858

MDHHS

Aaron Cooch

CoochA@Michigan.gov | 517-284-4816

More Information and Resources

Contact Rebecca Taylor, Project Manager, at TaylorR@Michigan.gov or 517-284-5160 for additional technical information, or visit EGLE's Diamond Chrome web page at Michigan.gov/DiamondChrome.

[Attachment 1 – Map of Approximate Groundwater Plume](#)

[Attachment 2 – Map of Soil Sample Exceedances](#)

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