

Diamond Chrome Plating Trichloroethylene (TCE) Investigation

Frequently Asked Questions

General Information

Diamond Chrome Plating (DCP), located at 604 S. Michigan Ave. in Howell, uses a chemical called trichloroethylene, or TCE, in its manufacturing operations, specifically for removing grease from metal parts. There is a concern that TCE has moved into the outdoor air from the degreaser.

What is trichloroethylene?

Trichloroethylene, or TCE, is a chemical used as a solvent. Diamond Chrome uses it to degrease metal parts.

Diamond Chrome Plating and TCE Concerns

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) recently requested that DCP address compliance issues identified with its TCE vapor degreaser. The compliance issues are a concern because excess vapors from inside the DCP plant have moved from the building to the outdoor air which indicated the degreaser wasn't operating properly.

Response Activities

- The Livingston County Health Department (LCHD), in collaboration with Michigan Department of Health and Human Services (MDHHS) and EGLE, issued a public health order on November 18, requiring DCP to: 1) stop TCE emissions, 2) demonstrate that the actions taken have stopped emissions, and 3) cooperate with LCHD, MDHHS, and EGLE.
- EGLE, with the support of MDHHS and LCHD, is working to evaluate the health risks of DCP's releases of TCE into the air.
- DCP has a signed consent decree with EGLE. A consent decree is a legally enforceable voluntary settlement that contains a compliance program to resolve alleged violations to ensure they are not repeated.
- DCP collected indoor air samples from inside three homes northeast of the building and soil gas samples from under the homes beginning in March 2019. The amount of TCE in the indoor air was higher than the health-based screening levels. Because there was a health concern from the amount of TCE in indoor air, MDHHS and LCHD asked DCP to install air purifying units in all three homes as a precaution until the source of the TCE could be determined. DCP installed the air purifying units.

- Since then, EGLE and DCP have continued the investigation of indoor air, soil gas, sewer gas, outdoor air, and roof vents on DCP's building to determine the source(s) and extent of the TCE contamination. DCP had already taken some steps to minimize TCE exiting the building.
- EGLE, MDHHS, and LCHD received multiple results on November 13, 2019, from outdoor air samples. These results showed TCE levels higher than health-based screening levels within the neighborhood northeast of DCP.
- EGLE is continuing to collect and evaluate outdoor air data. The U.S. EPA is assisting EGLE with collection of air samples in the area.
 - Air samples, (24-hour air collection), will be taken in the neighborhood close to Diamond Chrome starting on Tuesday, November 19, 2019.
 - Other air samples, (15-minute air collection), will be taken on Wednesday, November 20, 2019 and Thursday, November 21, 2019. The sample results and an explanation of them will be provided to the community as soon as they are available.
- EGLE continues to work with DCP on several regulatory issues but is currently focused on the release of TCE from the facility that was detected in the outdoor air. EGLE is conducting outdoor air sampling and coordinating further outdoor air sampling with DCP and the EPA, providing that data to the health departments, and supporting the health departments' efforts to notify the public and protect public health.

What levels of TCE are in the air near my home?

EGLE staff have done preliminary testing on the air around DCP and the results showed there is a concern with TCE in the area. The results also showed further testing was needed. This testing was done on November 19, 2019. Results from this testing will be shared as soon as they are received.

Where were the TCE Samples taken?

A map of the locations where air samples were collected is on the EGLE website, Michigan.gov/DiamondChrome.

Health Information

LCHD, in collaboration with the MDHHS and EGLE, issued a public health order to DCP on November 18 requiring DCP to: 1) stop TCE emissions, 2) demonstrate that the actions taken have stopped emissions, and 3) cooperate with LCHD, MDHHS, and EGLE.

The order was issued because air test results showed higher amounts of TCE were being released to the air from DCP and could get into nearby neighborhoods. The order requires DCP to avoid, correct, or remove the use of the TCE, and remove the health risk. In partnership with EGLE, the MDHHS and LCHD continue to evaluate and address DCP's TCE release.

How could I come into contact with TCE?

You may breathe in TCE by living by or working in an area or building where TCE is used. TCE is also in some household products such as gun cleaner and automotive brake cleaner.

How can TCE affect my health?

Animal studies have been done to learn how TCE might affect people. There have also been studies of workers exposed to high levels of TCE. These studies show that TCE may lead to certain health effects.

- Breathing TCE during pregnancy may cause heart defects in the developing fetus.
- Breathing TCE for a long time may affect the immune system.
- Breathing TCE over a lifetime can increase the risk of developing kidney cancer.
- There is also some evidence that TCE might increase the risk of developing non-Hodgkin's lymphoma (a type of blood cancer) or liver cancer.

Having TCE exposure does not mean you will have health issues now or in the future. A person's risk of developing health effects depends on how much TCE they breathe, how long they breathe it, and how their body reacts to it. If you believe you are having health problems related to TCE, talk to your doctor.

How long does TCE stay in the body?

TCE leaves the body in a day or two once exposure has stopped.

Should I be tested for TCE?

There are blood and urine tests that can check for TCE. These tests are not normally available through your doctor's office since they require special equipment and must be sent to certain laboratories.

A test done a few days after exposure has stopped will not tell you how much TCE you were exposed to because TCE leaves the body quickly.

Blood and urine tests will not tell you if TCE has affected or could affect your health, or if a current health condition is caused by TCE.

How can I tell if the TCE is in the air around my home?

It can be difficult to know if TCE is in the air around your home. TCE is a clear and colorless. The amount of TCE coming from DCP has no odor. Professional testing of the air around your home may be the only way to know if there is TCE in the air.

Where can I get more information?

For more information, visit the website Michigan.gov/DiamondChrome.

Health-Related Questions:

Michigan Department of Health and Human Services Hotline
800-648-6942

Livingston County Health Department
517-546-9850

Environmental Evaluation Questions:

EGLE Environmental Assistance Center
800-662-9278