

FACT SHEET



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

East 52nd Street Groundwater Contamination

Office of Land Quality – Federal Programs – Site Investigation Program

317-232-8941 • 800-451-6027

www.idem.IN.gov

100 N. Senate Ave., Indianapolis, IN 46204

Background:

- In 2008, carbon tetrachloride and trichloroethylene groundwater contamination was discovered on a property in Indianapolis during subsurface investigations conducted under oversight by the Indiana Brownfields Program.
- The area of investigation is located along East 52nd Street from College Avenue to Crestview Avenue, and 46th Street to 56th Street in Indianapolis.
- Two properties located within the area are being investigated by IDEM's Voluntary Remediation Program or the State Cleanup Program.

Environmental Impacts:

- Carbon tetrachloride is a chemical most often found as a colorless gas. It is a sweet-smelling, clear liquid. Carbon tetrachloride is a manufactured compound and does not occur naturally. It is now banned for use in consumer products.
- Carbon tetrachloride was used in the production of refrigeration fluid and propellants for aerosol cans, pesticides, cleaning fluids, degreasing agents, fire extinguishers, and spot removers.
- The International Agency for Research on Cancer (IARC) has determined that carbon tetrachloride is possibly carcinogenic to humans.
- Trichloroethylene is a chemical most often found as a colorless liquid with a sweet odor and a sweet, burning taste. Trichloroethylene is a manufactured chemical and does not occur naturally.
- The two major uses of trichloroethylene are as a solvent to remove grease from metal parts and as a chemical to make other chemicals.
- Trichloroethylene breaks down very slowly in soil and water and is removed mostly through evaporation to air.
- Trichloroethylene can be released to air, water, and soil at places where it is produced or used.
- The IARC classified trichloroethylene as carcinogenic to humans. The U.S. Environmental Protection Agency (U.S. EPA) characterized trichloroethylene as carcinogenic to humans by all routes of exposure.
- Humans can be exposed to both carbon tetrachloride and trichloroethylene by breathing contaminated air, drinking contaminated water, or working in facilities that use these chemicals.
- Drinking small amounts of trichloroethylene and carbon tetrachloride for long periods may cause liver and kidney damage, impaired immune system function, and impaired fetal development in pregnant women, although the extent of some of these effects is not yet clear.
- Some studies have shown that both tetrachloride and trichloroethylene may cause liver, kidney, or lung cancer.

IDEM's Role:

- The Indiana Department of Environmental Management (IDEM) is responsible for protecting human health and the environment while providing for safe industrial, agricultural, commercial, and governmental operations vital to a prosperous economy.
- IDEM's Site Investigation Program is currently evaluating contamination found in areas that could be possible source(s) of the groundwater impacts. The Site Investigation Program works to assess potential environmental hazards and prioritize contaminated sites for further needed actions. Once the sample results have been evaluated, IDEM will determine any future actions necessary to address the contamination.
- IDEM staff are available to answer questions and address concerns of residents and businesses.

Citizen's Role:

There are several actions every citizen can take to reduce their contribution or exposure to carbon tetrachloride and trichloroethylene:

- Indianapolis residents and businesses can assist the State of Indiana, when requested, by allowing IDEM to collect soil and/or groundwater samples from their residential property or place of business. The results of samples requested by IDEM will be provided to the property owner at no cost.
- IDEM will take the necessary precautions to avoid damaging property or landscaping.
- Access to private property will allow IDEM to sample the groundwater and subsurface soil in various locations in Indianapolis and to better identify the extent of contamination. Left unaddressed, the groundwater contamination may become more widespread and pose a more significant threat in the future.

Additional Information:

- The public may direct questions and concerns regarding IDEM's environmental investigation at the East 52nd Street Groundwater Contamination Site, including information on sampling results and potential environmental impacts to Katie Neighbors, IDEM Project Manager, at 317-234-7094; toll-free at 800-451-6027; or by email at kneighbo@idem.IN.gov.
- The news media may contact IDEM's media office at 317-232-8596; toll-free at 800-451-6027; or by email at media@idem.IN.gov.