

What is TCE?

Trichloroethene (TCE), also known as Trichloroethylene, is a nonflammable, colorless liquid used as an industrial degreaser. It is also found in common household products, such as paints, glues, spot removers, and pepper spray. TCE is a volatile organic compound (VOC). This means it evaporates easily into the air. In water, it slowly breaks down into other VOCs, such as vinyl chloride.

Routes of Exposure

If TCE gets into groundwater, it dissolves and then moves with the natural flow of the water. TCE is heavier than water, so it tends to move downward as well as horizontally with groundwater flow. Ecology has groundwater cleanup standards for TCE.

The area near the Boeing Fabrication Auburn site has a high water table. This means contaminated groundwater is fairly close to the surface of the ground in some locations. When groundwater levels are higher than the surrounding land, it can discharge into nearby ditches, ponds, or yards in low-lying areas. This type of water is called surface water.

Health Effects

People and animals could potentially be exposed to TCE by breathing, swallowing, or touching contaminated water in ditches and ponds.

How TCE will affect someone is hard to determine, especially without knowing exactly how much that person was exposed to, for how long, or how often.

- The U.S. Environmental Protection Agency and the National Toxicology Program say TCE can cause cancer. Worker exposure to TCE has been associated with liver cancer, non-Hodgkin's lymphoma, and kidney cancer.
- Human and animal studies show that exposure to low levels of TCE may cause effects to the immune system and heart-related health effects to unborn babies.
- Human studies show that people exposed to very high levels of TCE may have headaches, lung irritation, dizziness, poor coordination, and difficulty paying attention.
- Breathing high amounts of TCE could cause improper heart function, unconsciousness, and death.

More Information

- [Centers for Disease Control and Prevention](#), 1-800-232-4636
- [Agency for Toxic Substances and Disease Registry](#)
- [New York Department of Health](#)
- [Washington Department of Health](#), 1-888-485-7316