

WHAT IS TRICHLOROETHYLENE?

- Trichloroethylene (TCE) is a man made substance.
- Although trichloroethylene has many uses, the Department of Defense uses it mostly as an industrial cleaner to remove grease from metal parts.
- The use of trichloroethylene by the Department of Defense has been greatly reduced.

Properties and Uses of Trichloroethylene

Properties

- Colorless liquid
- Sweet odor
- Does not burn easily
- Evaporates quickly



Uses

- Industrial Cleaner
- Dry-cleaning agent
- Chemical manufacturing
- Solvent in paint and glues

DISTRIBUTION IN THE ENVIRONMENT

HISTORY

- Trichloroethylene was first produced in the US in 1925
- Trichloroethylene was originally used as an anesthetic for surgery prior to 1977
- Trichloroethylene's main use has been as an industrial cleaner

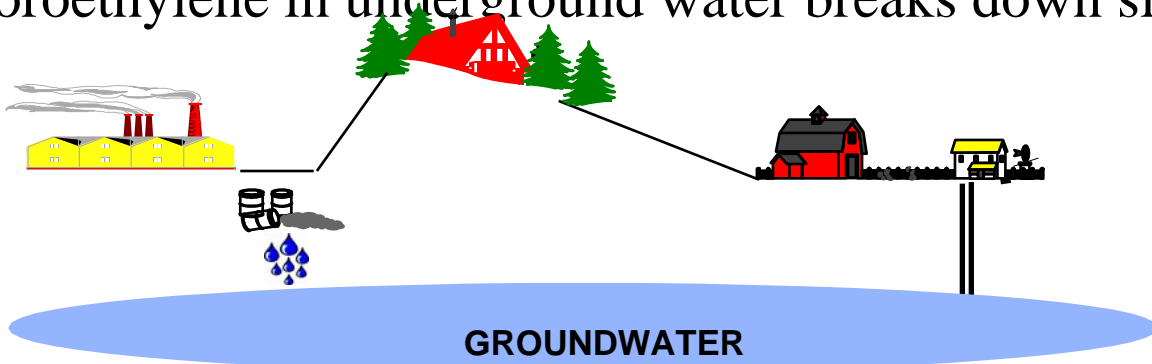
HOW TRICHLOROETHYLENE GETS IN THE ENVIRONMENT



- *Released into the air*
- *Spills onto soil*
- *Disposal in old landfills*

TRICHLOROETHYLENE IN THE ENVIRONMENT

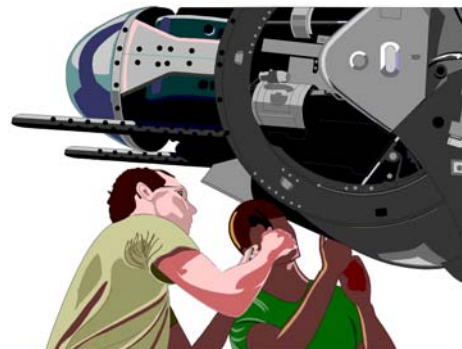
- Half of the trichloroethylene released into the air is removed in about a week
- Trichloroethylene passes through the soil into underground water
- Trichloroethylene in underground water breaks down slowly



EXPOSED POPULATIONS

HOW ARE PEOPLE EXPOSED TO TRICHLOROETHYLENE?

- Breathing air in workplaces where trichloroethylene is used/made
- Drinking underground water containing trichloroethylene
- Low levels in some consumer products



TRICHLOROETHYLENE IN THE BODY

- Trichloroethylene enters the body when you breathe air or drink water containing it
- Trichloroethylene can also enter the body through your skin
- Most of the trichloroethylene that enters the body is removed in urine within a day

KNOWN HEALTH EFFECTS

- Trichloroethylene mostly affects the central nervous system (brain)
- Exposure to large amounts of trichloroethylene results in headaches, dizziness, or sleepiness in humans
- Exposure to high doses of trichloroethylene causes liver and kidney damage in laboratory animals

