

# **wellcare<sup>®</sup> information for you about TCE (Trichloroethylene) & Groundwater**

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## **What is TCE?**

Trichloroethylene (TCE) is a colorless liquid with a somewhat sweet odor, like chloroform, and a sweet, burning taste. It is used as a solvent to remove grease from metal parts and also in adhesives, paint removers, typewriter correction fluids and spot removers used by dry cleaners.

Major environmental releases of TCE are due to air emissions from metal degreasing plants. Wastewater from metal finishing, paint and ink manufacturing and electrical/electronic component and rubber processing industries may also contain TCE. Even small amounts of TCE can contaminate large quantities of ground water.

The chemical can leach through soil and into ground water. TCE easily dissolves in water and remains there for a long time. The EPA reports that major TCE releases to land have occurred in Pennsylvania, Illinois, Georgia, Texas and Massachusetts, while releases to water have occurred in Georgia and West Virginia.

## **What are the health effects of TCE?**

According to the U.S. Environmental Protection Agency (EPA), some individuals who consume water containing excess amounts of TCE over many years may experience problems with their liver, and may have an increased risk of getting cancer.

## **How do I test for TCE?**

The EPA requires public water suppliers to test for TCE and treat water with levels above 5 parts per billion. It is recommended that well owners follow this standard. Contact your state or local health department for a list of state-certified laboratories.

## **What are the treatments for TCE in drinking water?**

An effective treatment is the use of a GAC (granular activated carbon) filter in combination with a reverse osmosis distillation device, also known as "packed tower aeration."

### For more information about TCE and Groundwater

Agency for Toxic Substances and Disease Registry (ASTDR). (July 2003). Trichloroethylene fact sheet. Retrieved on May 4, 2007 from [www.astdr.cdc.gov/tfacts19.pdf](http://www.astdr.cdc.gov/tfacts19.pdf)

U.S. Environmental Protection Agency (EPA). Consumer Factsheet on: Trichloroethylene. Retrieved on May 4, 2007 from [www.epa.gov/safewater/contaminants/dw\\_contamfs/trichlor.html](http://www.epa.gov/safewater/contaminants/dw_contamfs/trichlor.html)

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### For more information on your drinking water

Contact your local water well professional or health department for information on ground water in your area. The following websites provide up-to-date information on efforts to protect drinking water supplies and steps you can take as a private well owner. In addition, you may contact the **wellcare®** hotline at **1-888-395-1033**.

Underwriters Laboratories Inc. Drink Well™ Well Water Testing  
U.S. Environmental Protection Agency  
Water Quality Association

[www.uldrinkwell.com](http://www.uldrinkwell.com)  
[www.epa.gov](http://www.epa.gov)  
[www.wqa.org](http://www.wqa.org)

### For more information about wells and other wellcare® publications

**wellcare®** is a program of the **Water Systems Council (WSC)**. **WSC** is a national nonprofit organization dedicated to promoting the wider use of wells as modern and affordable safe drinking water systems and to protecting ground water resources nationwide. This publication is one in a series of **wellcare®** information sheets. There were more than 60 available at the time this document was published. They can be downloaded FREE from the WSC website at [www.watersystemscouncil.org](http://www.watersystemscouncil.org). Well owners and others with questions about wells or ground water can also contact the **wellcare®** hotline at **1-888-395-1033** or visit [www.wellcarehotline.org](http://www.wellcarehotline.org)



This publication was developed in part under Assistance Agreement No. EM-83331201-0 awarded by the U.S. Environmental Protection Agency. It has not been formally reviewed by EPA. The views expressed in this document are solely those of WSC. EPA does not endorse any products or commercial services mentioned in this publication.