

Oregon Department of Human Services

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TECHNICAL BULLETIN

HEALTH EFFECTS INFORMATION

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ENVIRONMENTAL TOXICOLOGY SECTION

October 1989

TRANS-1,2 – Dichloroethylene

For More Information Contact:

**Environmental Toxicology Section
(971) 673-0440**

**Drinking Water Section
(971) 673-0405**

TRANS-1,2 - DCE

Trans-1,2 - DCE is a volatile organic chemical used as a solvent for fats and to slow fermentation. It is a man-made or synthetic chemical with no natural sources. There is little information on the current production and use of this compound. Release of Trans-1,2 - DCE to the environment can occur from manufacturing plants. Studies have shown that it may result as a degradation product of trichloroethylene (TCE) and tetrachloroethylene (PCE).

OCCURRENCE OF TRANS-1,2 - DCE IN WATER SUPPLIES

When Trans-1,2 - DCE is released to surface waters it is expected to volatilize rapidly to air. Once released on to land, it migrates down through the soils and into the groundwater.

HEALTH EFFECTS OF DRINKING WATER CONTAMINATED WITH TRANS-1,2 - DCE

The United States Environmental Protection Agency (US EPA) has set a maximum contaminant level of 0.10 milligrams per liter (mg/L) for Trans-1,2 - DCE in public water systems. The cancer risk of Trans-1,2 - DCE has not been classified by the US EPA.

WHAT TO DO ABOUT WATER CONTAMINATED WITH TRANS-1,2 - DCE

Although a maximum contaminant level has been set for Trans-1,2 - DCE, which is very protective of public health, the Department of Human Services recommends that exposure to this compound be kept as low as possible. To accomplish this, water suppliers and other affected persons can take a variety of actions, such as closing contaminated wells, finding other supplies, or installing treatment systems at contaminated wells.

Persons whose supplies exceed the limits or who do not wish to consume even smaller amounts of Trans-1,2 - DCE can take several actions for short-term protection, including using bottled water or using in-home treatment devices to treat water for drinking and cooking purposes. Those who want to obtain home treatment systems are encouraged to contact the Department of Human Services for information on selecting the appropriate equipment.

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For More Information on Trans-1,2 - DCE contact the Drinking Water Section at 971-673-0405.