



# Tucson International Airport Area Superfund Site

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## Important Information for Private Well Owners in the South Tucson Area – EPA Has Revised its Assessment of 1,4-Dioxane, a Groundwater Contaminant that May Affect Your Well

### Groundwater Contamination in the South Tucson Area

The Tucson International Airport Area (TIAA) Superfund Site is a 10 square mile site located in southern Tucson. It includes 7 different project areas, the largest being Air Force Plant 44, Tucson International Airport, and Tucson Airport Remediation Project. Beginning in 1942, aircraft maintenance and parts manufacturers in and around the airport used and disposed of solvents and metals into sludge drying beds and the municipal sewer system. This resulted in contamination of groundwater by trichloroethylene (TCE), tetrachloroethene (PCE), **1,4-dioxane** and other chlorinated solvents and metals. The groundwater contamination plume is approximately one-half mile wide and five miles in length. To date, 11 City drinking water wells and several private wells have been shut down due to contamination.

A groundwater cleanup effort has been underway for many years. For more information, we recommend that you go to [www.epa.gov/region9/tucsonairport](http://www.epa.gov/region9/tucsonairport), which is the EPA Region 9 website, for details such as history, potentially responsible parties, clean-up activities, and links to documents, contacts, and opportunities for community involvement.

### 1,4-Dioxane

1,4-Dioxane is one of the major contaminants at TIAA. It is a compound which is both a solvent itself and a stabilizer for other solvents. 1,4-dioxane is present in products such as paints, varnishes, lacquers, paint & varnish removers, cosmetics and toiletries. It is used as a degreasing agent, in the manufacture of fats, oils, waxes, resins and in the pulping of wood. (Please see the enclosed flyer from the University of Arizona for more detailed information regarding 1,4 Dioxane.)

EPA has identified 1,4-dioxane as a compound which can cause cancer or increase the incidence of cancer when people are exposed to relatively low levels for extended periods of time. Other health effects, including kidney and liver damage, may result from much higher levels of exposure over shorter time periods.

### Why is EPA Concerned About Private Wells in the South Tucson Area?

EPA is concerned about 1,4-dioxane - and the other TIAA groundwater contaminants that are present in some South Tucson area private wells because these contaminants may put you and your family at increased risk of developing health effects, including cancer. Well water that is used for drinking, food preparation and other purposes around the home may expose you and your family to unhealthy levels of 1,4-dioxane, TCE, PCE and other chlorinated solvents.

### 1,4-Dioxane is a More Potent Carcinogen than Previously Recognized

EPA recently completed a multi-year scientific review of new information on the health risks caused by 1,4-dioxane. This review concluded that 1,4-dioxane is a more potent carcinogen than previously recognized. The review showed that 1,4-dioxane is 9 times more potent in its ability to cause or increase the incidence of cancer than EPA's previous understanding. This finding will result in EPA lowering by 9-fold the concentration range considered to be protective for cancer risks from 1,4-dioxane in drinking water.

## What Drinking Water Concentrations are Protective?

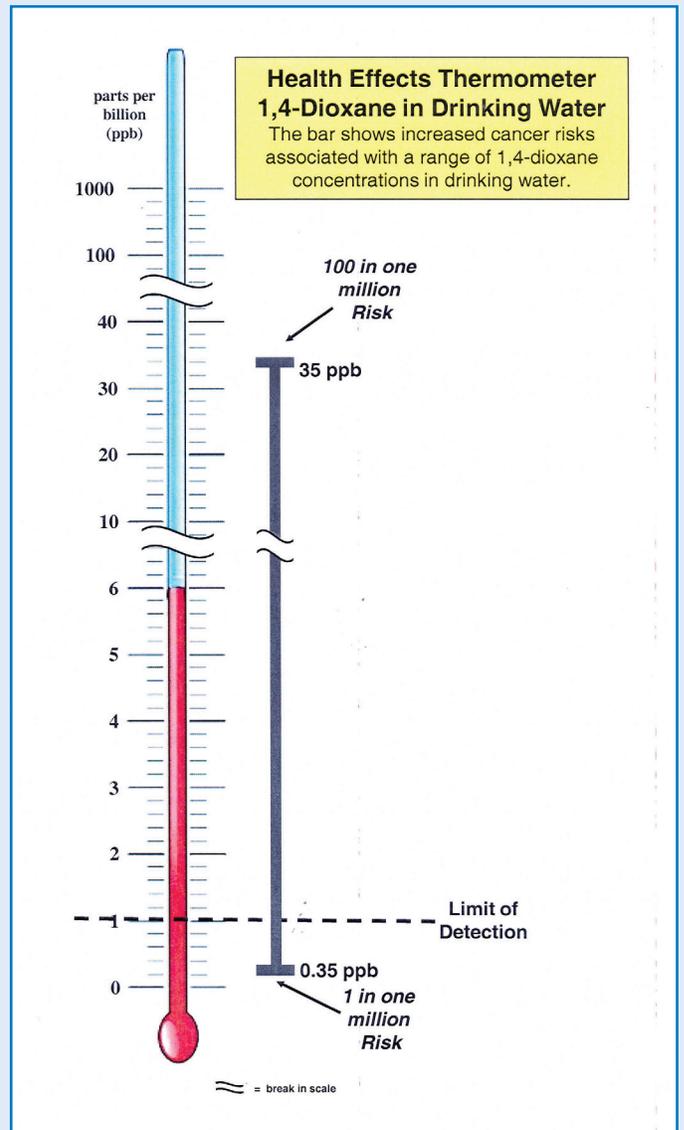
Over a lifetime of exposure, EPA considers drinking water concentrations of 1,4-dioxane in the range of 0.35 to 35 ppb (parts per billion) to be protective of the risk of developing cancer. Since higher levels of contamination produce higher risks, it is EPA's goal to keep 1,4-dioxane concentrations as low as reasonably possible within this protective range. Therefore, EPA is working with the TIAA responsible parties (Tucson Airport, Air Force Plant 44 and others) and Tucson Water to remediate (clean-up) the groundwater contamination.

## What You Should You Do

If your private well is contaminated, the TIAA site remediation program may eventually clean it to levels that will not place your family at risk. However, in the meantime, you and your family may be at increased risk of developing cancer if you use its water for drinking and other purposes in your home. EPA recommends that you have your well water tested by Pima County Department of Environmental Quality for 1,4-dioxane and the other TIAA contaminants. EPA will then help you determine the appropriate ways to safely use your well water.

Tap water, which is treated to drinking water standards, is safe to use for your household needs.

If you are aware of any other residents who have private wells in your area that are not receiving this information, please contact...



## For Further Information, Contact:

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