

1,2,3-Trichloropropane (TCP)

Frequently Asked Questions

1,2,3-Trichloropropane (TCP)

Also known as TCP, 1,2,3-Trichloropropane, is an organic chemical found in some groundwater supplies. In December 2017, the State Water Resources Control Board established the maximum contaminant level (MCL) for TCP of 5 parts per trillion (ppt), and compliance monitoring began in January 2018. There is not yet a Federal MCL.

TCP has been detected in some of the groundwater supplies in Fresno, Kern, Merced, Tulare, and Los Angeles Counties. Protecting City of Tulare resident's health and safety is our highest priority, and we are in the process of design and construction of treatment methods due to the implementation of a new MCL regulation regarding 1,2,3-Trichloropropane (TCP).

Construction of facilities will occur in phases, so treatment at the most critical water sources needed to meet current customer demand will be completed first. We will continue to install treatment at other facilities so that additional sources of supply can be utilized.

Is my water safe to drink?

This is not an immediate risk. If it had been, you would have been notified immediately. If you have other health issues concerning the consumption of this water, you may wish to consult your doctor. *You do not need to use an alternative (e.g., bottled) water supply.*

Why is the MCL set at 5 ppt, when the public health goal is 0.7 ppt?

This is determined by public health experts, which have calculated the theoretical health risks of TCP at the MCL at a 1-in-142,857 cancer risk over a lifetime of exposure. 5 ppt is the level that the State established as the detection reporting limit using currently approved testing methods. A public health goal (PHG) is the level of a contaminant below which there is no known or expected risk to health over a lifetime, assuming a person drinks 2 liters per day for 70 years. PHG's are established solely on the basis of health-effects data and do not consider technical or economic feasibility.

What is TCP?

TCP is a manmade chemical used in pesticides from late 1940 through the 1980's. The TCP contamination in our wells is believed to have come from soil fumigants. Soil fumigants in use today no longer contain TCP.

How is TCP treated?

The TCP is most efficiently removed using granular-activated carbon (GAC) filter technology. GAC filter vessels, will be installed at impacted wells to eliminate or substantially reduce the levels of TCP to meet the new standard.

Where does the TCP (or the waste) go after treatment?

TCP adheres to the surface of the carbon used in the treatment process. When the carbon is exhausted, a carbon provider will replace the old carbon with new carbon. The provider will properly dispose of or regenerate the old carbon in accordance with federal and state laws.

What is the City of Tulare doing?

On December 21, 2017, the Board of Public Utilities approved a contract with Provost & Pritchard Consulting for engineering design services, bidding and construction support services for the treatment of TCP contamination at six City well sites. To help the project move forward more quickly and due to some constraints with land acquisition, the project was split into two groups. The first two wells to receive treatment will be Well 17 and Well 37. The second group of wells planned for treatment are Wells 34, 35, 38, and 13. The first two wells will be at 60% design by June 15 with a bid date in August and anticipated completion of the project by May 2019. There is currently a 16 week lead time on the vessels from receipt of approved drawings. Treatment of the second group of wells will be completed by May 2021.

On May 8, 2018 the City received a Compliance Order from the State Water Resources Control Board for TCP. With adoption of the TCP Regulation, the State has been monitoring lab results for the first and second quarters of 2018 with regards to TCP. The compliance order requires quarterly sampling of all City wells and monthly sampling for the wells with TCP. The running average TCP level for Well 37 is 8 ppt which exceeds the MCL and has caused the system to be non-compliant with primary drinking water standards. Per the compliance order, “Public notification to the customers of the Water System shall be conducted and shall continue every three months until the State Water Board determines that the 1,2,3-TCP contamination is resolved.” The first notice must be mailed out by June 10, 2018. Due to the current state of the water system, we are unable to take any wells out of service to avoid the TCP regulations. Quarterly public notification of the customers will keep us in compliance until wells can be treated or taken out of service. Once the new wells and storage tanks are online, staff will re-evaluate the system and look to take the TCP wells out of service until treatment can be added. The Compliance Order states that the water system must be in full compliance with the regulation by May 10, 2021.

To find more information on TCP;

Agency for Toxic Substances and Disease Registry (ATSDR). 1992. “Toxicological Profile for 1,2,3-Trichloropropane.” www.atsdr.cdc.gov/toxprofiles/tp57.pdf

California Environmental Protection Agency (Cal/EPA). State Water Resources Control Board. 2009. “Groundwater Information Sheet 1,2,3-Trichloropropane (TCP).” Division of Water Quality. Groundwater Ambient Monitoring and Assessment (GAMA) Program. www.waterboards.ca.gov/gama/docs/coc_tcp123.pdf

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/123TCPhtml

For more information, please contact:

Tim Doyle, Water & Waste Water Collections Utility Manager

3981 S. K Street, Tulare, CA 93274

(559) 684-4324

<http://www.tulare.ca.gov/departments/public-works/water>

