

Water Advisory

By the Order of the Dutchess County Department of Health

Effective December 12, 2025

Greenbush Water System Public Water Supply # 1330629

Quarterly water samples were taken from this facility on 3/27/2025, 6/30/2025, 9/30/25, and 11/18/2025. The results of the tests indicate a 12-month running average for Total Trihalomethanes (TTHM's) of 122 µg/L, based on four quarterly results of 48.0 ug/L, 93.0 ug/L, 250 ug/L, and 95.0 ug/L respectively. This is above the maximum contaminant level (MCL) of 80 µg/L. The current exceedance of the drinking water standard for total trihalomethanes poses a low risk for health effects, however, if you are concerned and would prefer to further reduce exposure to these chemicals, you can consider the following practical measures mentioned below under *Additional Measures People Can Take*.

Our water comes from the Poughkeepsie Water Treatment Facility. This summer, our source water at the plant was affected by Harmful Algal Blooms (HABs). When HABs are present, our water treatment plant must increase disinfection to ensure the water remains safe to drink. This additional disinfection was necessary and successful in protecting against potential health effects associated with the HABs.

The United States Environmental Protection Agency (EPA) sets drinking water standards and requires the disinfection of drinking water. However, when used in the treatment of drinking water, disinfectants react with naturally-occurring organic and inorganic matter present in water to form chemicals called disinfection byproducts (DBPs). EPA has determined that a number of DBPs are a health concern at certain levels of exposure. Certain DBPs, including some trihalomethanes (THMs) and some haloacetic acids (HAAs), have been shown to cause cancer in laboratory animals. Other DBPs have been shown to affect the liver and the nervous system, and cause reproductive or developmental effects in laboratory animals. Exposure to certain DBPs may produce similar effects in people. EPA has set standards to limit exposure to THMs, HAAs, and other DBPs.

Trihalomethanes

Trihalomethanes are disinfection byproducts formed during treatment of drinking water by chlorine, the most commonly used disinfectant in New York State. Drinking water is disinfected by public water suppliers to kill bacteria and viruses that could cause serious illnesses. For this reason, disinfection of drinking water by chlorination is beneficial to public health. The amount of trihalomethanes in drinking water can change from day to day, depending on the temperature, the amount of organic material in the source water, the amount of chlorine added, and a variety of other factors. All public water systems that use chlorine as a disinfectant contain trihalomethanes to some degree.

Risk Characterization and Health Effects

The average detection of trihalomethanes over the past year of water system monitoring is not an immediate health risk. At this time, the annual average concentration for trihalomethanes is about 122 ppb which is exceeding the drinking water standard of 80 ppb. However, the drinking water standard is not a bright line between levels that cause health effects and those that do not. Rather, exceedance of the standard means that the water system must take actions to lower the concentration in drinking water while continuing to provide adequate disinfection of the water. There is still a wide margin of protection between the average levels that were detected over the past year and levels that are known to cause health effects. This means that the exposure presents a low level of risk for people consuming the water.

The information provided in the bullet points below outline what is known about the health effects of trihalomethanes.

- Studies in Human Populations: Some research studies suggest an association between people who drank water that likely contained trihalomethanes for 20 to 30 years and a slight increased risk for certain types of cancer. Additionally, a few studies suggest an association between exposure to elevated levels of trihalomethanes while pregnant and small increased risks for low birth weights, miscarriages, and birth defects. However, there are limitations to these studies because they did not characterize concentrations of trihalomethanes in drinking water well and it is not known how long and how frequently people in these studies drank the water. Therefore, we do not know for sure if the suggested increases in risk for cancer and other health effects are due to trihalomethanes or other factors.
- Studies in Laboratory Animals: Animals that were exposed to high levels of the individual trihalomethanes (chloroform, bromodichloromethane and dibromochloromethane) over long periods of time experienced effects on the liver, kidney, nervous system, reproduction, development, and cancer.

These studies highlight why water systems must take actions to control total trihalomethane levels.

Additional Measures People Can Take

Based on what is known about the health effects for trihalomethanes from the laboratory animal studies as well as the studies in human populations, it is important to manage trihalomethane exposures in drinking water. However, your water system is required to provide adequately disinfected drinking water to ensure that microorganisms that make people sick are not present. The current exceedance of the drinking water standard for total trihalomethanes poses a low risk for health effects, however, if you are concerned and would prefer to further reduce exposure to these chemicals, you can consider the following practical measures:

- Use bottled water for drinking, preparing formula, and cooking purposes.
- Ventilate your kitchen (e.g., use exhaust fans or open windows) when boiling water, washing dishes, or running the dishwasher to reduce the amount of chemicals in the air.
- Ventilate your bathroom when bathing or showering.
- Take shorter showers or baths to reduce the amount of chemicals inhaled from steam or absorbed through the skin.
- Consider the use of home water filters (e.g., pitcher, faucet, or below the sink filtration systems). Reverse osmosis and granular activated carbon filters can lower the concentrations of these chemicals in drinking water. Look for filters that are certified to remove trihalomethanes or total trihalomethanes (THM or TTHMs). It is very important to follow the operation and maintenance specifications to make sure that the filter works as intended.

The following steps are being taken to correct the problem:

- As the algae bloom dissipates, chlorine levels have been lowered at the Poughkeepsie Joint Water Treatment plant.
- DCWWA officials will continue to monitor levels quarterly and make appropriate operational adjustments as needed.
- DCWWA officials are coordinating with the Dutchess County Department of Health until DBP levels return to compliance.

For further information please visit/contact:

Operator – DCWWA (845) 486-3601
Dutchess County Department of Health (845) 486-3404
www.health.ny.gov/publicwater