

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Mechanicville City, PWSID# NY4500166

2nd Quarter 2024

Has Levels of Haloacetic Acids and Total Trihalomethanes Above Drinking Water Standards

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. Results of a sample collected at 147 Saratoga Avenue on May 16, 2024 and analyzed for Haloacetic Acids (HAA5s) showed 67.9 micrograms per liter (ug/L). The maximum contaminant level (MCL) for HAA5s is based on a Locational Running Annual Average (LRAA) where the results of the four most recent quarters are averaged and the result compared to the MCL of 60 ug/L. The results for the 3rd and 4th quarter of 2023 and the 1st and 2nd quarter of 2024 were 93.7, 60.0, 50.9, and 67.9 ug/L, respectively. The LRAA for the 1st Quarter 2024 was 68.1 ug/l.

Additionally, results of a sample collected at 4 Industrial Park Drive on May 16, 2024 and analyzed for Total Trihalomethanes (TTHMs) showed 88.1 micrograms per liter (ug/L). The maximum contaminant level (MCL) for THMs is based on a Locational Running Annual Average (LRAA) where the results of the four most recent quarters are averaged and the result compared to the MCL of 80 ug/L. The results for the 3rd and 4th quarter of 2023 and 1st and 2nd quarter of 2024 were 116, 97.8, 25.9, and 88.1 ug/L, respectively. The LRAA for the 4th Quarter 2023 was 81.9 ug/l.

What should I do?

You do not need to use an alternative (e.g., bottled) water supply. However, if you have specific health concerns, consult your doctor.

What does this mean?

This is not an immediate risk. If it had been, you would have been notified immediately.

Haloacetic acids 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 haloacetic acids 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 haloacetic acids to some degree.

The following paragraph summarizes and characterizes the available studies on human populations exposed to haloacetic acids, and provides a general summary of the health effects of haloacetic acids in animals, which occur at exposure levels much higher than exposures that could result through normal use of the water.

Some studies suggest that people who drank chlorinated drinking water containing disinfection by-products (including haloacetic acids) for long periods of time (e.g., 20 to 30

years) have an increased risk for cancer. However, how long and how frequently people actually drank the water, and how much haloacetic acids the water contained is not known for certain. Therefore, the evidence from these studies is not strong enough to conclude that the observed increased risk for cancer is due to haloacetic acids, other disinfection by-products, or some other factor. Studies of laboratory animals show that the two haloacetic acids, dichloroacetic acid and trichloroacetic acid, can cause cancer following exposure to high levels over their lifetimes. Dichloroacetic acid and trichloroacetic acid are also known to cause other effects in laboratory animals after high levels of exposure, primarily on the liver, kidney, and nervous system and on their ability to bear healthy offspring. The risks for adverse health effects from haloacetic acids in drinking water are small compared to the risk for illness from drinking inadequately disinfected water.

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.

The following paragraph summarizes and characterizes the available studies on human populations exposed to trihalomethanes, and provides a general summary of the health effects of trihalomethanes in animals, which occur at exposure levels much higher than exposures that could result through normal use of the water.

Some studies suggest that people who drank water containing trihalomethanes for long periods of time (e.g., 20 to 30 years) have an increased risk of certain health effects. These include an increased risk for cancer and for low birth weights, miscarriages and birth defects. The methods used by these studies could not rule out the role of other factors that could have resulted in the observed increased risks. In addition, other similar studies do not show an increased risk for these health effects. Therefore, the evidence from these studies is not strong enough to conclude that the observed increased risk for health effects is due to trihalomethanes, other disinfection by-products, or some other factor. Studies of laboratory animals show that some trihalomethanes can cause cancer and adverse reproductive and developmental effects after high levels of exposure. The risks for adverse health effects from trihalomethanes in drinking water are small compared to the risks for illness from drinking inadequately disinfected water.

What happened? What is being done?

We are continuing to monitor the levels of haloacetic acids and trihalomethanes in accordance with Department of Health requirements, and will provide required updates to our customers. We are additionally developing a plan with the Department of Health to address these MCL violations.