

Public Notification for Haloacetic Acid Exceedance
City of Mechanicville Drinking Water System
(April 1, 2017 – June 30, 2017)

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 contaminants in drinking water. Each calendar quarter samples are collected and analyzed to determine the levels of Haloacetic Acids (HAA) and Trihalomethanes (TTHM). HAAs and TTHMs are a byproduct of drinking water disinfection, which is needed to kill harmful organisms. An average of four quarterly samples is used to determine compliance with the New York State public drinking water standard.

In samples collected during May of 2017, the average level of HAAs was 63.7 micrograms per liter (ug/l) at the Saratoga Ave. testing site. This level exceeds the New York State public drinking water standards of 60 ug/l. Exceedance of the standards is not an immediate health hazard, but indicates that actions should be taken by the supplier of water to reduce contaminant levels and lower the potential for long term exposure. HAAs were found to be within acceptable levels at the Industrial Park testing site. TTHMs were acceptable at both testing sites.

HAAs are formed in drinking water during treatment by chlorine (the most commonly used disinfectant in New York State), which reacts with certain acids that are in naturally-occurring organic material (e.g., decomposing vegetation such as tree leaves, algae, or other aquatic plants) in surface water sources such as rivers and lakes. The amount of HAAs in drinking water can change from day to day, depending on the temperature, the amount of organic material in the water, the amount of chlorine added, and a variety of other factors. 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.

Some studies suggest that people who drank chlorinated drinking water containing disinfection by-products (possibly including HAAs) for long periods of time (e.g., 20 to 30 years) have an increased risk for certain health effects. These include an increased risk for cancer. However, how long and how frequently people actually drank the water as well as how much HAAs 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 HAAs, other disinfection by-products, or some other factor. Studies of laboratory animals show that the individual HAAs, 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 effects reported in studies of laboratory animals occur at exposures much higher than exposures that could result through normal use of the water. The risks for adverse health effects from HAAs in drinking water are small compared to the risk for illness from drinking inadequately disinfected water.

What does this mean for you?

At present, the water is suitable to drink, cook with, and bathe in. Some people may wish to take additional practical measures to reduce their exposure. We do not consider these measures necessary to avoid health effects, but they are provided as options. These include using bottled water for drinking and cooking purposes, or using water pitchers containing an activated carbon filter or a tap-mounted activated carbon filter. These filters are readily available in many grocery and home improvement stores. Ventilating bathroom areas (e.g., using exhaust fans or opening windows) when showering or bathing can also help reduce exposures from chemicals released into the air.

What is being done?

We are working with the Department of Health to determine the cause of this exceedance. The Department of Health has recently conducted an inspection of our water treatment plant. We hope we can optimize our treatment processes so that we can return to compliance quickly.