

# IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

## Town of Shelby Has Levels of 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. Testing results we received on 02/10/15 (1<sup>st</sup> quarter) and 08/21/15 (3<sup>rd</sup> quarter) show that our system exceeds the standard, or maximum contaminant level (MCL), for Total Trihalomethanes (TTHM's). The standard for TTHM's is 80 micrograms per liter (ug/l). The average level of TTHM's was 82.20 and 84.24 ug/l for the 1<sup>st</sup> and 3<sup>rd</sup> quarters, respectively. The calculation used to determine the MCL showed that the 2<sup>nd</sup> quarter of 2015 did not exceed the standard.

TTHM's are a group of chemicals that includes chloroform, bromoform, bromodichloromethane, and chlorodibromomethane. Trihalomethanes are formed in drinking water during treatment by chlorine, 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 TTHM's 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.

### 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?

Trihalomethanes are a group of chemicals that includes chloroform, bromoform, bromodichloromethane, and chlorodibromomethane. Trihalomethanes are formed in drinking water during treatment by chlorine, which is the most commonly used disinfectant in New York State. Chlorine 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 trihalomethanes formed in drinking water during disinfection 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 drink chlorinated water (which contains trihalomethanes) or water containing elevated levels of trihalomethanes for long periods of time may have an increased risk for certain health effects. For example, some studies of people who drank chlorinated drinking water for 20 to 30 years show that long term exposure to disinfection by-products (including trihalomethanes) is associated with an increased risk for certain types of cancer. A few studies of women who drank water containing trihalomethanes during pregnancy show an association between exposure to elevated levels of trihalomethanes and small increased risks for low birth weights, miscarriages and birth defects. However, in each of the studies, how long and how frequently people actually drank the water, as well as how much trihalomethanes the water contained is not known for certain. Therefore, we do not know for sure if the observed increases in risk for cancer and other health effects are due to trihalomethanes or some other factor. The individual trihalomethanes chloroform, bromodichloromethane and dibromochloromethane cause cancer in laboratory animals exposed to high levels over their lifetimes. Chloroform, bromodichloromethane and dibromochloromethane are also known to cause effects in laboratory animals after high levels of exposure, primarily on the liver, kidney, nervous system and on their ability to bear healthy offspring. Chemicals that cause adverse health effects in

laboratory animals after high levels of exposure may pose a risk for adverse health effects in humans exposed to lower levels over long periods of time.

**What happened? What is being done?**

On a weekly basis, we will be manually flushing the dead end lines where the samples were collected. This will begin immediately. Also, we will ensure that the installed programmable automatic flushing systems are working properly. These actions will enable us to control consistent flushing of our distribution system, which will improve the capability of meeting the EPA Stage 2 Disinfection Byproduct Rule. For more information, please contact Michael Fuller, Water Superintendent at 4062 Salt Water Works Rd, Medina, NY or (585) 798-3120 ext 306.

This notice is being sent to you by the Town of Shelby. State Water System ID's #: NY3600602, NY3622695, NY3630009, NY3630021, NY3630046, NY3630074, NY3630088, and NY3630104.

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