

NOTICE OF HIGH TRIHALOMETHANE LEVELS

Richfield Springs Village Water System

October 2022

From the 3rd quarter of 2021 through the 2nd quarter of 2022 (7/1/21 - 6/30/22) the Village of Richfield Springs water system was found to have an average concentration of total trihalomethanes (THM) that exceed the maximum contaminant level (MCL) of 80 parts per billion (ppb). Compliance with the MCL is based on the average of the four most recent quarterly sample results collected from each sampling location (called the locational running annual average or LRAA). The current THM LRAA is 82.8 ppb. Water suppliers are required to provide written public notification to consumers when an MCL is exceeded.

What are trihalomethanes? Trihalomethanes are a group of chemicals that are formed in drinking water during disinfection when chlorine reacts with 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. They are disinfection byproducts and include the individual chemicals chloroform, bromoform, bromodichloromethane, and chlorodibromomethane. 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.

Disinfection of drinking water by chlorination is beneficial to public health. Drinking water is disinfected by public water suppliers to kill bacteria and viruses that could cause serious illnesses, and chlorine is the most commonly used disinfectant in New York State. All public water systems that use chlorine as a disinfectant contain trihalomethanes to some degree.

What are the health effects of trihalomethanes? 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 trihalomethanes were a major factor contributing to the observed increased risks for these health effects. Studies of laboratory animals show that some trihalomethanes can cause cancer and adverse reproductive and developmental effects, but at exposures much higher than exposures that could result through normal use of the water. The United States Environmental Protection Agency reviewed the information from the human and animal studies and concluded that while there is no causal link between disinfection byproducts (including trihalomethanes) and human health effects, the balance of the information warranted stronger regulations that limit the amount of trihalomethanes in drinking water, while still allowing for adequate disinfection. The risks for adverse health effects from trihalomethanes in drinking water are small compared to the risks for illness from drinking inadequately disinfected water.

As of the third quarter 2022(September), the current LRAA is 78.3 parts per billion. This means that the Village water system is now under the MCL for THM and back in compliance.

Consumers having questions on any of the above can contact Doug Bordinger, Water Superintendent at 315-748-8143 or the EPA's Safe Drinking Water Hotline at 800-426-4791..