

***Annual Drinking Water Quality Report for 2016***  
***Town of Hounsfield***  
***Water District #5***  
***(Public Water Supply ID NY2221870)***

**INTRODUCTION**

To comply with State regulations, Town of Hounsfield WD5, will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, we conducted a number of tests for various contaminants. Of those contaminants, we found 1 of those contaminants, trihalomethanes, at a level higher than the State allows. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact Jeff Kenney, Town of Hounsfield Water Operator at (315) 782-6380. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Town board meetings.

**WHERE DOES OUR WATER COME FROM?**

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water system serves approximately 150 people through 75 service connections. Our water source includes two groundwater wells. The water is disinfected with chlorine. Fluoride and phosphate are also added to the water prior to distribution. Residuals for chlorine, fluoride, and phosphate are tested on a daily basis at the water treatment plant and at different times in the distribution system. Daily operational data is summarized on a monthly report that is submitted to the NYS Department of Health for review. In addition, we purchase water from the City of Watertown and the Village of Sackets Harbor.

**ARE THERE CONTAMINANTS IN OUR DRINKING WATER?**

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. **More information about contaminants and potential health**



Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, or AL)	Likely Source of Contamination
Fluoride	No	8/9/16	0.8	mg/l	N/A	2.2	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Zinc	No	12/17/13	0.2	mg/l	5	5	Erosion of natural deposits.
Barium	No	8/9/16	0.09	mg/l	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chloride	No	12/17/13	32.0	mg/l	N/A	250	Naturally occurring or indicative of road salt contamination.
Iron	No	12/17/13	0.06	ug/l	N/A	300	Naturally occurring.
Manganese	No	12/17/13	0.01	mg/l	N/A	300	Naturally occurring.
Sodium <sup>3</sup>	No	12/17/13	32.0	mg/l	N/A	(See health effects)	Naturally occurring; Road salt; Water softeners; Animal waste.

**Notes:**

- 1 – The level presented represents the 90<sup>th</sup> percentile of the 10 samples collected. The action level for lead was not exceeded at any of the 10 sites tested.
- 2 – The level presented represents the 90<sup>th</sup> percentile of the 10 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90<sup>th</sup> percentile is equal to or greater than 90% of the copper values detected at your water system.
- 3 - Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.

**Definitions:**

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Action Level (AL)**: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Non-Detects (ND)**: Laboratory analysis indicates that the constituent is not present..

**Milligrams per liter (mg/l)**: One part of liquid in one million parts of liquid (parts per million - ppm).

**Micrograms per liter (ug/l)**: One part of liquid in one billion parts of liquid (parts per billion - ppb).

**Picocuries per liter (pCi/L)**: A measure of the radioactivity in water.

**Locational Running Annual Average (LRAA)**: Sample site specific quarterly average

## **WHAT DOES THIS INFORMATION MEAN?**

As you can see by the table, our system had violations for Trihalomethanes. The violation is based on the locational running annual average. As you are aware, public notification is required when this type of violation is received. The following is a copy of the health effects language that is sent with the violation notice for Trihalomethanes;

Trihalomethanes 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 trihalomethanes 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. Chlorine is the most commonly used disinfectant in New York State. 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.

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The Town has installed aeration equipment at the Route 180 water treatment plant. The Town is collecting additional samples to determine if the equipment will address the elevated Trihalomethane concentrations in WD5. If this does not address the issues in WD5, the Town will further evaluate different treatment and operational avenues to address the issue.

### **IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

During 2016, our system was in compliance with all applicable State drinking water operating, monitoring and reporting requirements except the Stage 2 Disinfection By-products rule.

### **DO I NEED TO TAKE SPECIAL PRECAUTIONS?**

Some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

### **INFORMATION ON FLUORIDE ADDITION**

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at a properly controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, we monitor fluoride levels on a daily basis to make sure fluoride is maintained at a target level of 0.7 to 1.0 mg/l. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

### **WHY SAVE WATER AND HOW TO AVOID WASTING IT?**

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ◆ Saving water saves energy and some of the costs associated with both of these necessities of life;
- ◆ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- ◆ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential firefighting needs are met.

### **CLOSING**

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.