

# *Annual Drinking Water Quality Report for 2013*

## *Town of Yorkshire Water District 1*

82 S. Main St, P.O. Box 6, Delevan, N.Y. 14042

Public Water Supply ID# NY0412216

### **INTRODUCTION**

To comply with State and Federal regulations, Yorkshire Water District 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. **During the year 2013, your tap water met all State drinking water health standards.** We are proud to report that our system did not violate a maximum contaminant level or any other water quality statement. 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 **Larry Groves, Water Commissioner, (716) 474-7568** or **Dan Heineman, Water Operator, (716) 496-5037**. 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. **The meetings are held the third Monday of each month at 7:00 P.M. in the Yorkshire Town Hall.**

### **WHAT IS THE SOURCE OF OUR WATER?**

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, 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 source is a single 36 ft. deep well. As the water is pumped, it is disinfected by injection of gaseous chlorine. Fluoride, which promotes strong teeth, is also added during the pumping process. The water is pumped to a storage tank from where it flows by gravity throughout the distribution system. Our water system serves 900 people through 230 service connections.

In 2003 the NYS DOH completed a source water assessment for our water system, based on available information. Possible and actual threats to the drinking waters sources were evaluated. The source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the well. The susceptibility rating is an estimate of the potential contamination of the source water. It does not mean that the water delivered to consumers is, or will become contaminated. See section "ARE CONTAMINANTS IN OUR DRINKING WATER?" for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

As was mentioned before, our water is derived from one well. The source water assessment has rated the susceptibility to contamination for this well as medium-high from enteric bacteria, enteric viruses and nitrates; and medium from cations/anions (salts, sulfate), metals, halogenated solvents, other industrial organics, petroleum products and protozoa. High susceptibility ratings were given to contamination from nitrates and enteric bacteria. These ratings for the well are due to its proximity to pasture lands, oil and gas wells and permitted discharge facilities (industrial/ commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government). While the assessment rates our source as being susceptible to enteric bacteria, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards. A copy of this assessment, including a map of the assessment area, can be obtained by contacting us, as noted above.

## ARE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: coliform bacteria, inorganic compounds, nitrate, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. We also test for chlorine and fluoride daily. 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, may be more than one year old.

It should be noted that all drinking water, including bottled water, might 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 effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the Cattaraugus County Health Department at (716) 373-8050.

<b>Table of Detected Contaminants</b>							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Average or Range)	Unit Measure -ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
<b>Disinfectant</b>							
Chlorine Residual	No	2013	Avg. = .73 (.16 – 1.10)	mg/l	N/A	MRDL = 4	Water additive used to control microbes.
<b>Inorganic Contaminants</b>							
Barium	No	1/31/12	180	ug/l	2,000	MCL = 2,000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Copper <sup>1</sup>	No	7/10/12 to 7/11/12	150 (58 - 170 )	ug/l	1,300	AL = 1,300	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Fluoride-Treated	No	2013 Daily	100 – 1,800	ug/l	N/A	MCL = 2,200	Water additive that promotes strong teeth.
Lead <sup>2</sup>	No	7/10/12 to 7/11/12	3 (ND – 5.4)	ug/l	0	AL = 15	Corrosion of household plumbing; erosion of natural deposits.
Nitrate	No	9/23/13	1.25	mg/l	10	MCL = 10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
<b>Disinfection By-products</b>							
Haloacetic Acids	No	8/24/11	5.2	ug/l	N/A	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes	No	8/24/11	28	ug/l	N/A	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.

### Notes

- 1 - 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. In this case, ten samples were collected at your water system and the 90<sup>th</sup> percentile value was the second highest values, 150 ug/l. The action level for copper was not exceeded at any of the sites tested.
- 2 - The 90<sup>th</sup> percentile level for lead was 3 ug/l. None of the samples from ten sites exceeded the action level of 15 ug/l.

### 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.

**Maximum Residual Disinfectant Level (MRDL)**: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG)**: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

**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)**: Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

**Micrograms per liter (ug/l)**: Corresponds to 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.

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

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected at values well below the level allowed by the State. We are required to provide the following information on lead in drinking water.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The Town of Yorkshire is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

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

Although our drinking water met or exceeded state and federal regulations, 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**

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 1.0 mg/l. None of the monitoring results showed fluoride levels at the 2.2 mg/l MCL for fluoride.

## **WHY SAVING WATER IS IMPORTANT**

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 and helps to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ◆ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- ◆ Turn off the tap when brushing your teeth.
- ◆ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it up and you can save almost 6,000 gallons per year.
- ◆ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 or more gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- ◆ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

#### **CURRENT EVENTS**

Please be aware that our annual spring water line flushing and fall hydrant service and flush may cause dirty or cloudy water to appear when you run water. Dirty or cloudy water can also appear when the Fire Company responds to an emergency or is conducting hydrant exercises. If you experience some cloudy water (dirty water), let your water run until it clears. During these times it does not present any health concerns. If you notice this condition at other times of the year it could be an indicator of a problem.

#### **CLOSING**

Thank you for allowing us to continue to provide your family with quality drinking water this past year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call our office if you have questions.

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