# **Annual Drinking Water Quality Report for 2016**

# Randolph Town Water District

72 Main Street, Randolph, N.Y. 14772 Public Water Supply ID# NY0400348

# **Conewango Town Water District**

Public Water Supply ID # NY 0430112

### Introduction

To comply with State and Federal regulations, the Town of Randolph 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. 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, Dave Fischer Superintendent of Public Works at (716) 358-9701. If you want to learn more, please attend any of our regularly scheduled Board meetings. They are held on the 2<sup>nd</sup> Wednesday of the month, at 7:30 P.M. in the Board Room at the Municipal Building, 72 Main Street. We want you to be informed about your drinking water.

### WHERE DOES OUR WATER COME FROM?

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 that 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.

Your water is obtained from ground water sources. Several shallow wells, comprising the Randolph Well Field, are located off the Reservoir Road. The East Randolph Well Field (which supplies parts of Randolph and the Conewango Town Water District) is located off Hatchery Road and consists of three drilled wells. An auxiliary well source is located on Church Street and is known as the Church Street Well. Sodium hypochlorite is added to the source waters prior to entering the distribution system to ensure proper disinfection. The Randolph Town Water District serves approximately 1,738 people through 788 service connections. The Conewango Town Water District serves approximately 217 people through 79 service connections.

In 2003, the NYS DOH completed a source water assessment for our water systems, based on available information. Possible and actual threats to the drinking water sources were evaluated. The source water assessment includes susceptibility ratings based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. 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 THERE 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 several wells. The source water assessment has rated the combined susceptibility to contamination for the Randolph Well Field wells as medium-high from industrial organics and petroleum products. These ratings for the wells are due to their proximity to oil and gas wells.

The source water assessment has rated the combined susceptibility to contamination for the East Randolph Wells Field as medium-high from enteric bacteria, enteric viruses and nitrates; and medium from cations/anions (salts, sulfate), halogenated solvents, metals, other industrial organics, petroleum products and protozoa. These ratings for the wells are due to their proximity to underground storage tanks and a permitted discharge facility (industrial/commercial facility that discharges wastewater into the environment and is regulated by the state and/or federal government). While the assessment rates our sources 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 these assessments, including a map of the assessment areas, can be obtained by contacting us as noted above.

### ARE THERE 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, volatile organic compounds, nitrate, lead and copper, total trihalomethanes, haloacetic acids and radiological compounds. In addition, we test for chlorine daily. 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 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 effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the Cattaraugus County Health Department at (716) 701-3386.

			Table of I	Detected Co	ntaminar	ıts	
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measure- ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Disinfectant							
Chlorine Residual - Randolph	No	2016	Avg. = .77 (.28 - 2.03)	mg/l	n/a	MRDL = 4	Water additive used to control microbes.
- formerly E Randolph	No	2016	Avg. = $.34$ (.22 – 54)				
- Conewango TWD	No	2016	Avg. = .35 (.2189)				
Inorganic Contamir	ants		1 1		-		
Barium - Randolph	No	1/20/15	63	ug/l	2,000	MCL = 2,000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural
- formerly E Randolph	No	1/20/15	128				deposits.
Copper <sup>1</sup> - Randolph	No	7/28/15	548 (44 - 570)	ug/l	1,300	AL = 1,300	Corrosion of household plumbing systems; erosion of natural deposits; leaching from
- formerly E Randolph	No	7/28/15	90 (12 - 138)				wood preservatives.
Lead <sup>2</sup> - Randolph	No	7/28/15	1.5 (.55 – 2.1)	ug/l	0	AL = 15	Corrosion of household plumbing; erosion of natural deposits.
- formerly E Randolph	No	7/28/15	2 (.47 – 2.2)				(4.p. 55.15)
Disinfection Byprod	ucts						
Haloacetic Acids - Randolph	No	8/17/16	1.6	ug/l	n/a	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes	No	8/17/16	21	ug/l	n/a	MCL = 80	By-product of drinking water disinfection needed to kill
- Randolph - formerly E Randolph	NO	8/17/16	21 2.7				harmful organisms. TTHms are formed when source water contains large amounts of organic matter.

#### Notes:

1 - The levels presented represent the 90th percentile of the 10 sites tested for each system. 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 90th percentile is equal to or greater than 90% of the copper or lead values detected at your water system. In this case, 10 samples were collected from each system and the 90th percentile value for copper in the Randolph system was the second highest value, 548 ug/l, and the former East Randolph was 90 ug/l. The action level for copper was not exceeded at any of the sites tested.

2- The 90th percentile level for lead in the Randolph system was 1.5 ug/l and the former East Randolph was 2 ug/l. None of the sites exceeded the action level of 15 ug/l

#### **Definitions:**

<u>Action Level (AL)</u>: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. <u>Maximum Contaminant Level (MCL)</u>: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible. <u>Maximum Contaminant Level Goal (MCLG)</u>: 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. <u>Micrograms per liter (ug/l)</u>: Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

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

N/A: Not applicable.

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

### 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. Regardless, 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 Randolph Town Water District 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.

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

In July, 2011 the Cattaraugus County Health Department issued a Ground Water Under Direct Influence of Surface Water (GWUDI) determination for the former Village of Randolph shallow well field. The Town completed an engineering study and must install proper filtration treatment to the existing supply or develop a new well source. The Town of Randolph has been approved for a \$2 Million grant and a 0% interest loan to implement a \$3.74 Million capital improvement project that would correct the violation and make other necessary upgrades. Improvements planned are replacement of all customer meters (completed in 2014), repair of the water storage tank (completed in 2015), various distribution main upgrades (completed in 2016), drilling a new well (completed in 2016), and reconstructing the Church Street well house (scheduled for 2017).

Due to the GWUDI status, we are required to include the following statement in this report: "Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches."

### DO I NEED TO TAKE SPECIAL PRECAUTIONS?

No, the water is still being disinfected with chlorine, but 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).

### 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, 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, 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 gallons a day from one of these, otherwise, invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

### **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. 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.