

INTRODUCTION

To comply with State regulations, the Village of Orchard Park 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, 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 standard. This report provides an overview of 2017'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 water utility, please contact Michael Murphy, Director of Public Works at 662-3866. If you notice any suspicious activity that would affect the water supply, call the police @ 911. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Village Board Meetings. The meetings are held the 2nd and 4th Monday of each month at 7 pm at 4295 South Buffalo Street, Orchard Park, NY.

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.

The Village of Orchard Park's water system serves approximately 3246 people through 1,065 accounts. The Village of Orchard Park purchased 105 million gallons of treated water during 2017. Of the 105 million gallons purchased, the Village sold 79 million gallons at a rate of \$6.30 per 1,000 gallons. The remaining, unaccounted for, was water used during fire fighting, flushing or lost through water main breaks or leaks. The daily average of water treated and pumped into the distribution system was 293,000 gallons per day. Our highest single day was 404,000 gallons.

The Erie County Water Authority obtains its water from two sources. The Authority's Sturgeon Point Treatment Plant, in the Town of Evans, draws water from Lake Erie to supply southern Erie County and communities in Cattaraugus County. The Van De Water Treatment Plant in Tonawanda draws water from the Niagara River and services municipalities in northern Erie County. These two plants deliver an average of 65 million gallons a day to more than one half million people in Western New York. Water is treated by polyaluminum chloride, which causes suspended particles in the water to clump together forming floc. Floc particles then settle to the bottom of large sedimentation basins. The water is then filtered through layers of anthracite, sand and gravel to remove any remaining particles. Chlorine is added for disinfection to kill bacteria. Small amounts of fluoride are added to help prevent tooth decay. Caustic soda is added to stabilize alkalinity of the water and prevent corrosion in home plumbing. Powdered activated carbon is added in the summer months to help remove unpleasant tastes and odors.

The Erie County Water Authority does issue an Annual Water Quality Report each year. Their 2017 AWQR is now available for review and is available in electronic form. If you have any questions regarding this report, please submit your requests to questionscomments@ecwa.org.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, your drinking water is routinely tested for numerous contaminants. These contaminants include: microbiological compounds such as total coliform and E.coli bacteria, turbidity, inorganic compounds such as nitrate and lead, volatile organic compounds, total trihalomethanes, haloacetic acids, and radiological compounds. To view the "2017 Water Quality Monitoring Report - Annual Water Quality Report Supplement", prepared by the Erie County Water Authority, please visit ecwa.org. The tables presented in the Supplement depict which compounds were tested for and which compounds were detected or not detected in your drinking water. The State allows testing for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the 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 effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the Erie County Health Department at (716-961-6800).

As the State regulations require, we have tested your drinking water for the following contaminants. These contaminants include: total coliform, copper and lead. During the last monitoring in 2017, analysis found that the Village of Orchard Park met the lead and copper standards. This testing is required again in 2020. Three samples are collected monthly to test for Coliform, independent, certified laboratories assure the accuracy of analytical results. Asbestos testing was conducted in May 2016 in which there was none detected. We have been testing for disinfection byproducts and are under the allowed levels.

CHLORINE RESIDUALS

In addition to contaminant testing, the Village of Orchard Park also performs daily chlorine residual sampling to provide an indication of the proper amount of chlorination present within the water system. The presence of chlorine residual in drinking water indicates that a sufficient amount of chlorine was added initially to the water to inactivate the bacteria and some viruses that cause diarrheal disease.

As the State regulations require, we have tested your drinking water for the following contaminants. These contaminants include: total coliform, copper, and lead. As noted below there were no detections of Coliform in any of the monthly samples we collected through 2017. Additionally, there were no exceedences for copper or for lead in the last residential sampling round in September 2017. All of the copper and lead samples tested fell under the respective action levels for copper and lead.

TABLE OF DETECTED CONTAMINANTS

Contaminant	Violation Yes / No	Date of Sample	Detected (Avg/Max) (Range)	Unit of Measure	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
DISINFECTANTS							
Residual Chlorine	No	Daily	0.5 .11-1.5	mg/l	NA	4.0	Water additive used to control microbes.
INORGANICS							
Copper	No	9/15/17	27.3 ug/l *2 ND - 27.8	ug/l	0	AL = 1300	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.

Lead	No	9/15/17	1.5 ug/l *1 ND - 2.4	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
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*1 – The level presented represents the 90th 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 90th percentile is equal to or greater than 90% of the lead values detected at your water system. The action level for lead was not exceeded at any of the sites tested.

*2 – The level presented represents the 90th percentile of the ten 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 90th percentile is equal to or greater than 90% of the copper values detected at your water system. The action level for copper was not exceeded at any of the sites tested.

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Contaminant	Violation Yes / No	Sample Date(s)	Detected	Unit of Measure	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Total Trihalomethanes	No	8/16/17	44.7	ug/l	NA	80 ug/l	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water
Total Haloacetic Acids	No	8/16/17	18.9	ug/l	NA	60 ug/l	By-product of drinking water disinfection needed to kill harmful organisms

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): 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).

Milliliters (ml): Corresponds to one part of liquid in one million parts of liquid (parts per million – ppm).

NE: Not Established.

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.

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 below New York State requirements. We are required to present 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. Village of Orchard Park 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?

During 2017, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

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 FLOURIDE 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. Fluoride is added to your water by the Erie County Water Authority before it is delivered to us. 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, ECWA monitor fluoride levels on a daily basis to make sure fluoride is maintained at a target level of 0.7 mg/l. During 2016, 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 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.

SYSTEM IMPROVEMENTS

No system improvements were made in 2017.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of the community. If you have any questions about this report or concerning your drinking water, please contact Michael Murphy, Director of Public Works (716-662-3866). The Village of Orchard Park remains dedicated to the goal of providing a high-quality product and reliable cost-effective service to its customers at a reasonable rate.