

# **2018 ANNUAL WATER QUALITY REPORT FOR THE VILLAGE OF LIMA AND WATER DISTRICTS ONE AND TWO (TOWN OF LIMA)**

**New York State Water Supplier ID#: Village NY2501021 Town NY2525000**

Each year, water suppliers in New York State are required under New York State Department of Health regulations to distribute a report to their customers that summarizes water quality data for the previous calendar year. Since the Village and Town of Lima water districts purchase their water from the City of Rochester, it is our practice to meet this requirement through the distribution of the City of Rochester's annual report. Due to additional treatment (disinfection) and other conditions associated with our system, it is expected that the results of regulated components will differ/vary from those recorded from the City of Rochester report. As a result, this report acts as a supplement to the report provided by the City of Rochester.

This report is intended to inform you (our customers) about where your water comes from, what it contains, and how it compares to standards set by local, state, and federal agencies. Our constant goal for the Village and Town of Lima is to provide our customers with an abundant supply of safe drinking water. We would like you to be aware of our continuing efforts to improve the quality and quantity of this valuable natural resource, which we supply to each and every customer. In 2018, the Village and Town of Lima did not violate a maximum contaminant level or any other water quality standard.

## **WHERE DOES OUR WATER COME FROM?**

The Village of Lima began purchasing water from the City of Rochester in the fall of 1989. This water primarily comes from Hemlock Lake, although we do receive some Lake Ontario water mixed in on rare occasions. This is probably the result of the City closing valves due to a water main break or performing maintenance on their mains. We receive the City's water from their system north of the Livingston County line on Route 15A. From there we pump the water south along Route 15A through the Town of Lima supplying the customers of Water District One along the way. At the time of pumping we add a small amount of disinfectant (sodium hypochlorite solution), and a phosphate (Calciquest) to combat rust deposits and build ups in the mains and valves. The chlorine and Calciquest residuals are monitored every day to insure proper dosage. Bacteria testing is performed monthly in the Town and the Village water supplies. In 2018, disinfection by-products were sampled quarterly in both the Village of Lima and in the Town of Lima water supply.

## **FACTS AND FIGURES**

When pumping, water flows to the Village distribution system and replenishes the water tower located on Seneca Ave. This is done automatically to keep the tower as full as possible at all times. The purpose of the water tower, which holds 500,000 gallons, is (1) to have a two day supply in case there is a problem with our pumping system, (2) to keep a constant water pressure through out the distribution system, and (3) to act as a reserve for fire protection. In 2018, we pumped on average about 188 thousand gallons a day to meet our daily demand. The total amount of water produced in 2018 was 68,482,000 gallons. The amount of water delivered to Village customers was approximately 60 million gallons and the Town customers received approximately 8.3 million gallons. Of the 68 million gallons produced for the Village, we had an unaccounted total of approximately 10 million gallons (around 15.4% of the total amount produced). This water was used to flush mains, fight fires, as well as leakage. Our highest one-day total of water pumped into the distribution system was 293,000 gallons. The Village of Lima serves approximately 2,900 people through about 650 service connections. In 2018, water customers were charged on the average \$65.00 for the first 10,000 gallons and \$5.50 per additional 1,000 gallons of water. The City of Rochester's conduit in North Bloomfield supplies the Town of Lima Water District One and Three. District number Two is supplied by the City conduit at the county line on Route 15A where the chlorine residual is monitored monthly. The Town of Lima serves roughly 220 people through 117 service connections. As you will notice the City of Rochester has completed the bulk of this report (PAMPHLET) because they are our supplier. The City of Rochester is required to perform testing for contaminants in the water before it is delivered to Lima. Detected contaminants are listed in the enclosed report.

## **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 bacteria, lead and copper, and disinfection by-products. The table presented below depicts which compounds were detected in your drinking water. It should be noted that all drinking water, including bottled drinking 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 Livingston County Health Department at 585-243-7280.

### **COLIFORM BACTERIA**

Coliform bacteria is a group of bacteria that are commonly used as a measure of the sanitary quality of drinking water. The presence of a specific type of coliform known as *E.coli* is considered to be a potentially serious compromise to the sanitary quality. Bacteria in drinking water not only originate at the source, but also can be introduced through a variety of local distribution conditions. For this reason, we are required to test a minimum of three times a month in the Village water system, and at least once per month in the Town water system. These samples are sent out to a New York State certified laboratory for analysis.

The regulatory limit, maximum contaminant level (MCL) for coliform bacteria is violated if more than 5% of samples tested are positive for this group of bacteria. The MCL for *E. coli* is violated if it is found to be present.

### **DISINFECTION BY-PRODUCTS**

Disinfection by-products (DBP's) are organic chemical compounds that form when disinfectants (in our case, chlorine) react with certain types of organic compounds that are found naturally in the source water. DBP's are regulated because at high levels they have been shown to cause adverse health effects. It is important to note that to insure sanitary quality; we are required to maintain a minimum level of chlorine residual throughout the distribution system. Since chlorine dissipates with time and distance, we must add additional chlorine to the water we purchase from Rochester in order to meet this requirement.

The two main categories of regulated DBP's are TRIHALOMETHANES (THM's) and HALOACETIC ACIDS (HAA's). Levels of these compounds in our water were below the established regulatory limits also known as the maximum contaminant level (MCL).

Table of Detected Contaminants								
Location	Contaminant	Violation Yes/No	Date of Sample(s)	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit MCL	Likely Source of Contamination
<b>Disinfection By products</b>								
Village of Lima 7024 W. Main St Stage 2 Site	Total Trihalomethanes (TTHM)	No	5/2/17 8/1/17 11/7/17 2/6/28 5/1/18 8/7/18 11/6/18	(51-108) <sup>1</sup> 68.75	ug/l	N/A	<sup>1</sup> 80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
	Haloacetic acids (HAA)	No	5/2/17 8/1/17 11/7/17 2/6/28 5/1/18 8/7/18 11/6/18	(26-35) <sup>1</sup> 31.75	ug/l	N/A	<sup>1</sup> 60	By-product of drinking water chlorination.
Town of Lima 1175 Bragg St. Stage 2 Site	Total Trihalomethanes (TTHM)	No	5/16/17 8/15/17 11/20/17 2/20/18 5/15/18 8/21/18 12/5/18	(42-70) <sup>1</sup> 50.25	ug/l	N/A	<sup>1</sup> 80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
	Haloacetic acids (HAA)	No	5/16/17 8/15/17 11/20/17 2/20/18 5/15/18 8/21/18 12/5/18	(1-21) <sup>1</sup> 7.8	ug/l	N/A	<sup>1</sup> 60	By-product of drinking water chlorination.
<b>Lead and Copper</b>								
City of Rochester	Lead	No	June 1- Sept. 30, 2018	<sup>2</sup> 11.7	ug/l	0	AL=15	Corrosion of plumbing
City of Rochester	Copper	No	June 1- Sept. 30, 2018	<sup>2</sup> 0.217	ug/l	1.3	AL=1300	Corrosion of plumbing

Note:

<sup>1</sup> This represents the highest locational running annual average calculated from data collected. Although one TTHM sample exceeded 80 ug/l in the Village of Lima water supply, compliance is calculated based on the highest locational running annual average which was below the MCL.

<sup>2</sup> During 2018 the City of Rochester collected and analyzed 63 samples for lead and copper. The level included in the table represents the 90<sup>th</sup> percentile of the levels detected.

**Definitions:**

**Action Level (AL):** The concentration of copper or lead that when exceeded triggers actions to be taken by a water system.

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

**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.

## **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 the level allowed by the State.

## **LEAD**

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. The Village and the Town of Lima are 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 it for drinking or cooking. If you are concerned about lead in your drinking 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>.

## **INFORMATION ON FLUORIDE ADDITION**

Fluoride is added to your water by the City of Rochester water treatment plant 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, the City of Rochester monitors fluoride levels on a daily basis to ensure that the fluoride level is maintained at a target level of 0.7 mg/l with an operating range from 0.65-0.75 mg/l (See the City of Rochester's Table of Detected Contaminants).

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

Yes, the Village of Lima meets or exceeds all other rules that govern operations.

## **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).

## **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.
- ◆ 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.

## **SYSTEM IMPROVEMENTS**

In 2018, we did a significant rehabilitation project at our pumping station on route 15a. We upgraded our motors that run our pumps and installed variable controlled drives. We also got new pumps and piping thru out the building. In 2019 and 2020, we will be working on the water tower along with some mains in our distribution system.

## **CLOSING**

If you feel that there might be a problem with your water please call the Village office and we will arrange for a sample to be taken and tested. We regularly send our employees to State certified courses to educate them about managing our water system and how to provide you with the safest drinking water possible.

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. If you should have any questions about this report or any water related topics please feel free to call Benjamin Luft, Village Superintendent of Public Works at (585) 624-4525 or Keith Arner, Town Superintendent of Public Works (585) 582-1443. You may also call The Village of Lima Clerks office at (585) 624-2210, Lima Town Clerks office at (585) 582-1130 or The Livingston County Department of Health at (585) 243-7280.