

# **ANNUAL DRINKING WATER QUALITY REPORT FOR 2016**

**Village of Monroe Water Department  
76 Woodcock Road  
Monroe, New York 10950  
Public Water Supply ID# 3503535**

## **INTRODUCTION**

To comply with State and Federal regulations the Village of Monroe Water Department 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 has never violated a maximum containment level or any other water quality statement. If you have any questions about this report or concerning your drinking water, please contact Ernest Mabee, our Chief Operator in Charge of Water Treatment at 783-5162. 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 on the first and third Tuesday of each month at the Monroe Village Hall, 7 Stage Road, Monroe, New York 10950.

## **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 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 the tap water is safe to drink, the State and the EPA prescribe regulations; which limit the amount of contaminants in the water provided by the 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 surface water drawn from Mombasha Lake reservoir located in the Town of Monroe and Well #4, located in the Village of Monroe. During 2016, our water supply did not experience any water source restrictions.

## **FACTS AND FIGURES**

The Village of Monroe Water Department serves a population of approximately 8,314 within the Village and Town of Monroe districts, through 2,915 service connections. The water supply is obtained from Mombasha Lake reservoir and a well located at the Smith Clove Park. The water is filtered and treated at the filtration plant. The well water is chlorinated on site. At the filtration plant, P.A.C.L.-108 (Polyaluminum chloride) is used in our treating process as a coagulant. Ortho-Polyphosphate is added for corrosion control and sodium hypochlorite is used to disinfect present bacteria. An average volume of approximately 853,985 gallons per day was withdrawn from Mombasha Lake Reservoir and 172,949 gallons per day from the well. Customers were delivered 827,306 gallons per day through metered sales. The difference is attributed to backwashing the filters, water main breaks, hydrant flushing, Village Town and County designated hydrant use, normal losses, meter tampering, fires and non-metered Village building usage. To reduce our losses, we are upgrading our older water mains on a continual basis, along with replacing older style water meters. In 2016, residential water customers within the Village of Monroe paid \$4.35 per 1,000 gallons. Town water customers paid \$10.88 per 1,000 gallons. And commercial customers paid \$6.53 per 1,000 gallons.

## SYSTEM IMPROVEMENTS

The Village of Monroe Water Department will continue upgrading its water meter reading systems. We will continue to install new radio reading devices on homes in certain areas of the Village and Town. 100% of the Village is equipped wireless radio read meters. This new system will allow us to read your water meter by driving down your street without having to go onto your property. We will be leaving notices at your home when we will be installing meters in your area; along with inquiring whether an irrigation system is currently on your property. If you do have one, it must be inspected by a member of the Water Department for a back flow preventer. This is now mandatory by the N.Y.S. Department of Health as a requirement to help prevent contamination of our water supply system. During this time, water meter seals will also be inspected. Anyone who may notice a broken water meter seal may call 783-4440 to have it resealed to avoid a violation of our Village Code. We will continue to upgrade the piping within the distribution system along with repairing and rebuilding fire hydrants. All projects are performed based upon funding. In 2016 the Village of Monroe upgraded 2 new pumps and 2 new check valves in our Pinetree Pumpstation. We also installed a tank level indicator at Pinetree which communicates to our main water treatment plant. We repaired the high flow fire pump in our Briarcliff pumpstation as well as the level sensor probe. 1 new Mueller fire hydrant was replaced on Spring st. 1400' of new 8" ductile iron water main was installed on Gilbert st. , including new service lines to residents. A new check valve was installed at the intersection of High st and Gilbert st to maintain correct pressure at our new Van Kueren pumpstation. At our water treatment plant we removed and replaced the filter media in all 5 filters which helps the finished turbidity.

### ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for various contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead, copper, volatile organic compounds, total trihalomethanes, 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. 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 the 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) , <http://water.epa.gov/drink>, or by contacting the Orange County Department of Health at (845) 291-2331.

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Barium (Filter Plant)	No	3/9/16	0.011	mg/l	2	MCL = 2	Erosion of natural deposits.
Nitrate (Well #4)	No	5/11/16	1.5	mg/l	10	MCL = 10	Runoff from fertilizer use
Copper (See Note 2)	No	2014	90 <sup>th</sup> = 360 Range = 15.3 to 1100	ug/l	1300	AL = 1300	Corrosion of household plumbing systems
Lead (See Note 3)	No	2014	90 <sup>th</sup> = 5.5 Range = ND to 14	ug/l	0	AL = 15	Corrosion of household plumbing systems

Table of Detected Contaminants Con't							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Sodium (Filter Plant)	No	5/11/16	42	mg/l	N/A	See Note 5	Road Salt
Sodium (Well #4)	No	5/11/16	82	mg/l	N/A	See Note 5	Road Salt
Total Trihalo-methanes (TTHMs) (Location 1)	No	2016	63.25 <sup>4</sup> Range = 48 to 87	ug/l	N/A	MCL = 80	Byproduct of drinking water disinfection needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Total Trihalo-methanes (TTHMs) (Location 2)	No	2016	47.5 <sup>4</sup> Range = 33 to 65	ug/l	N/A	MCL = 80	
Five Haloacetic Acids (HAA5) (Location 1)	No	2016	41.4 <sup>4</sup> Range = 33.6 to 51	ug/l	N/A	MCL = 60	
Five Haloacetic Acids (HAA5) (Location 2)	No	2016	38.25 <sup>4</sup> Range = 26 to 49	ug/l	N/A	MCL = 60	
Turbidity <sup>1</sup>	No	2/22/16	.37	NTU	N/A	TT= ≤ 1.0 NTU	Soil Runoff
Turbidity <sup>1</sup>	No	2/2016	99.3%	NTU	N/A	TT=95% of samples ≤ 0.3 NTU	Soil Runoff
Chloride (Well #4)	No	6/13	156	mg/l	N/A	MCL = 250	Naturally Occurring
Gross Alpha	No	2/6/14	7.05	pCi/l	0	MCL = 15	Erosion of natural deposits
Nickel (Filter Plant)	No	3/16	0.93	ug/l	100	MCL = 100	Erosion of natural deposits
Sulfate (filter plant)	No	3/16	6.3	mg/l	n/a	MCL = 250	Naturally Occuring

**Notes:**

1 – Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement (.37 NTU) for the year occurred on 2/22/16. State regulations require that turbidity must always be below 5 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU. Although 2/16 was the month when we had the fewest measurements meeting the treatment technique for

turbidity, the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.

2 – The level presented represents the 90<sup>th</sup> percentile of the 30 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, thirty samples were collected at your water system and the 90<sup>th</sup> percentile value was the 27<sup>th</sup> highest value (360 ug/l). The action level for copper was not exceeded at any of the sites tested.

3 – The level presented represents the 90<sup>th</sup> percentile of thirty samples collected. The action level for lead was not exceeded at any of the 30 sites tested.

4 – This level represents the annual quarterly average calculated from data collected.

5 - 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.

**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.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

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

**Nephelometric Turbidity Unit (NTU):** A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**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).

### **WHAT DOES THIS INFORMATION MEAN AND WHAT IS BEING DONE?**

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.

### **IS OUR WATER SUPPLY SUSCEPTIBLE TO CONTAMINATION?**

The NYS DOH has evaluated this PWS's susceptibility to contamination under the Source Water Assessment program (SWAP) and their findings are summarized in the paragraph below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source monitoring to ensure the water delivered to consumers meets all applicable standards. The analysis of available information for this source water assessment did not find any significant sources of contamination in this watershed. Statewide and local databases of permitted facilities were used to identify discrete potential sources of contamination. No discrete sources were identified

within the assessment area. Land use within the watershed was evaluated by contaminant category to rate the likely prevalence of contamination associated with the various types of land use. The contaminant category ratings for land use types were determined to be low or negligible. The overall susceptibility of this watershed to potential sources of contamination was found to be low. A copy of the assessment, including a map to the assessment area can be obtained by contacting the water department.

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

This past year, our system was in compliance with all applicable State drinking water 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 people with cancer undergoing chemotherapy, organ transplant recipients, people with HIV/AIDS, some of the geriatric population and infants can be particularly at risk for infections. These people should seek advice from their health care providers about any restrictions. The 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 1-800-426-4791 or by visiting <http://www.epa.gov/drink>.

## **YOUR RESPONSIBILITY**

Your responsibility for the maintenance of your water system is from and including the tap of the Village's water main in the street or right-of-way, into your building, including all plumbing in your building. You should keep your curb box clean and accessible for emergency shut-off to water to your building. Keep all your valves in good working order and protect your water meter from freezing during cold winter months. Do not allow hoses to lay in pools, buckets, tanks or anything that may cause contamination to our water system.

## **WHAT SHOULD BE REPORTED**

If you see anyone tampering with a hydrant, report this to your local police department immediately. Operating a hydrant without Water Department permission is a violation of the Village Law. If you see any suspicious automobiles or people walking in areas of our water supply tanks, please report this to the local police department also. This also applies to anyone climbing our fences or tanks. If you see water running out of the street or ground where you have never seen water before or if your water is discolored after running it for a few minutes, report this to the water department.

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

To meet present and future demands, there are a number of reasons why it is important to conserve water including:

- Saving water saves energy and decreases costs.
- Saving water reduces the costs of energy required to pump water and the need to construct costly new wells, pumping systems and water towers.
- Saving water lessens the strain of the water system during a dry spell or drought. Helping to avoid severe water use restriction so that essential firefighting 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 lessen use whenever possible. 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. Make sure you have a full dishwasher before running it.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15-20 gallons a day. Repairs can save almost 6,000 gallons per year.

- Check your toilets by putting a few drops of food coloring in the tank and watch for a few minutes to see if the color shows up in the toilet bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. A repair can save more than 30,000 gallons per 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 the meter level moved, then you may have a leak.

## **CLOSING STATEMENT**

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 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 of 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 any questions or concerns. Thank you!