

## **Annual Drinking Water Quality Report for 2023**

**Village of Middleville  
3 South Main Street  
Middleville NY 13406  
(Public Water Supply ID# 2102309)**

### **INTRODUCTION**

To comply with State regulations, Village of Middleville, 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 David Mueller Water System Operator at 315-269-9215. 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 second Monday of each month at 7:00pm in the Village Municipal Building, Correy Hall, 3 South Main Street.

### **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.

Our water system serves about 550 people through 222 metered connections. Our water source is ground water consisting of two wells located at the North end of the Village. Water pumped from these wells is disinfected with sodium hypochlorite and stored in a water tank prior to distribution to your homes. Last year our system delivered about 48,774,000 gallons of water an average of 133,627 gallons per day. This is an increase 15% over 2022.

**The New York State Department of Health has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state 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 wells. The susceptibility rating is an estimate of the potential for 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 contaminants, if any, that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.**

As mentioned before, our water is derived from 2 drilled wells. The source water assessment has rated these wells as having a medium susceptibility to enteric viruses, due to land cover and medium susceptibility to petroleum products and halogenated solvents due to discrete sources of contamination in the assessment area. Because of the high natural sensitivity of the sources based on soils, surficial geology, aquifer information, bedrock geology and water quality tests, this created an overall medium high to high susceptibility for the sources to contamination.

*While the source water assessment rates our wells as being susceptible to microbials, 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 for microbial contamination.*

*A copy of the assessment, including a map of the assessment area, can be obtained by contacting us, as noted below.*

### **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, nitrate, lead and copper, primary inorganic chemicals, total trihalomethanes, principal organic chemicals and synthetic organic chemicals. 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, 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 Herkimer District Office of the New York State Health Department at 315-866-6879.

**Table of Detected Contaminants**

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
Nitrate	No	8/10/23	0.587	Mg/l	10	10	Run off of fertilizer, leaching of septic, natural erosion.
Lead Note 1	No	6/25/18	<1.0 range <1.0/3.3	ug/l	N/A	AL-15	Plumbing corrosion, Natural erosion.
Barium	No	10/25/22	0.0185	Mg/L	2	2	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits.
Chromium	No	10/16/18	0.0000043	Ug/l	100	100	Discharge from steel and paper mills, Erosion of natural deposits
Nickel	No	10/25/22	0.0030	Mg/l			
Copper Note 2	No	6/25/18	0.12 Range <0.020/0.13	Mg/l	N/A	1.3	Plumbing corrosion, Pressure treated lumber, Natural erosion.
Fluoride	No	12/10/2015	0.066	Mg/l	N/A	2.2	Erosion of natural deposits, water additive that promotes strong teeth, discharge from fertilizer and aluminum factories
<b>Disinfection Byproducts</b>							
Total Trihalomethanes	No	Annual Average 2023	15.5 ug/l Range 5.2/19	Ug/l	N/A	MCL-80	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (3)	No	Annual Average 2023	7.1 ug/l Range 0/10.8	UG/L	N/A	60	By-product of drinking water chlorination.

**Radioactive Contaminants**

Radium	No	12/2/19	0.517	pCi/L	0	MCL-15	Erosion of natural deposits
Radium 228	No	11/17/16	0.871	pCi/L	0	MCL-15	Erosion of natural deposits
Gross Alpha	No	12/2/19	0.418	pCi/L	0	MCL-5	Erosion of natural deposits

#### 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 lead 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 the highest level detected was (<1 ug/l). The action level for lead was not exceeded at any of the sites tested.

2 – The level presented represents the 90<sup>th</sup> percentile of the ten samples collected. In this case, ten samples were collected at your water system and the 90<sup>th</sup> percentile value was the 0.12 mg/l, the highest level detected was 0.14. The action level for copper was not exceeded at any of the 10 sites tested.

#### 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.

**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).

**Nanograms per liter (ng/l):** Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

**Picograms per liter (pg/l):** Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

**Picocuries per liter (pCi/L):** A measure of the radioactivity in water.

**Millirems per year (mrem/yr):** A measure of radiation absorbed by the body.

**Million Fibers per Liter (MFL):** A measure of the presence of asbestos fibers that is longer than 10 micrometers.

Radon is a naturally-occurring radioactive gas found in soil and outdoor air that may also be found in drinking water and indoor air. Some people exposed to elevated radon levels over many years in drinking water may have an increased risk of getting cancer. The main risk is lung cancer from radon entering indoor air from soil under homes.

In 2019, we collected one sample that was analyzed for radon. The [results was 74 picocuries/liter \(pCi/l\)](#). For additional information call your state radon program (1-800-458-1158) or call EPA's Radon Hotline (1-800-SOS-Radon).

## **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:

**Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Middleville water system is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact the Village of Middleville Water System at 315-269-9215. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.**

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

During the 2023 Middleville water system was found to be in compliance with New York State Sanitary Drinking Water Regulations and the National Primary Water Regulations.

## **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).

## **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. Please call our office if you have questions.

To comply EPA and DOH new regulations the village of Middleville Water Dept. may be requesting your help in the process of determining your water line material.