

***Annual Drinking Water Quality Report for 2022***  
***Amdur Park Water***  
***Village of Woodbury***  
***Program ID No. 3503570***

## **INTRODUCTION**

To comply with State and Federal regulations, the Amdur Park Water System is issuing this Annual Report describing the quality of your drinking water. The purpose of this is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year we conducted tests for over sixty (60) contaminants. We detected eleven (11) of those contaminants and only found one (1) of those contaminants at a higher level than the State allows. As we told you at that time, our water temporarily exceeded a drinking water standard and we rectified the problem by replacing the manganese greensand filters. One filter was placed into service in December 2022; the second filter was placed into service March 2023. In January 2023, a new manganese sample was collected and results were non-detect confirming the filtration system is functioning adequately. 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 your drinking water, please contact Michael Phillips, Water Administrator (845-928-9514 x1256). We want you to be informed about your drinking water. If you want to learn more, please attend any of the regularly scheduled Village Board meetings held on the second and fourth Thursday of each month.

## **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 Amdur Park Water supply is obtained from two rock wells within the system's service area. Prior to distribution the water is treated with potassium permanganate to enhance removal of iron, greensand filters to filter iron and remove manganese and by disinfection with chlorine to destroy any microorganisms that might find their way into the water supply.

## **SOURCE WATER ASSESSMENT**

The NYS DOH has completed a source water assessment for this system based on available information. Possible and actual threats to this drinking water resource were evaluated. This 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 customers is, or will become contaminated. See "Table of Detected Contaminants" 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 mentioned before, our water is derived from two drilled rock wells. The source water assessment has rated these wells as having a medium susceptibility to microbials and nitrates and petroleum products. These ratings are due primarily to the close proximity of SPDES permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) and the low-level residential activity located in the assessment area. In addition, the wells draw from a confined aquifer with the estimated recharge area within the selected time of travel and the overlying soils may not provide adequate protection from potential contamination. While the source water assessment rates our wells as being susceptible to microbials, please note that your 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 in this report.

## **FACTS AND FIGURES**

The water system serves a population of approximately 180 people through 47 service connections. The total amount of water produced in 2022 was 3,318,048 gallons based on well meter readings. The daily average of water treated and pumped into the distribution system was 9,091 gallons per day. Our highest single day was 24,901 gallons per day. The amount of water delivered to customers was 3,412,016 gallons. The total used for filter backwash in treatment of the supply was 387,800 gallons. There is an anomaly in the data that resulted in a greater amount of water billed than produced by the wells (and supplemented with imports during construction). The anomaly is attributed to well meters not functioning properly; The well meters were recently replaced as part of the Amdur Park Water District Improvement project and this is not expected to be an issue for future reporting. In 2022, the annual average water charge for a typical user was \$152.08.

## **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, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological 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. 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 Orange County Health Department at (845-291-2331).

**Table of Detected Contaminants**

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
<b>Inorganic Contaminants</b>							
Barium	No	9/21/2022	0.0135	mg/l <sup>1</sup>	2.0	MCL=2.0	Erosion of natural deposits
Chloride	No	9/21/2022	58.6	mg/l	N/A	MCL=250	Naturally occurring
Iron (see Note 3)	No	9/21/2022	117	ug/l <sup>2</sup>	N/A	MCL=300	Naturally occurring
Lead (see Note 4)	No	7/2022 8/2022	90 <sup>th</sup> = 1.6 (Range = ND to 1.8)	ug/l	0	AL=15.0	Corrosion of household plumbing systems
Copper (See Note 4)	No	7/2022 8/2022	90 <sup>th</sup> = 0.1020 (Range = ND to 0.110)	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems
Sulfate	No	9/21/2022	51.8	mg/l	N/A	MCL=250	Naturally occurring
Sodium	No	9/21/2022	15.9	mg/l	N/A	NOTE 5	Naturally occurring
Manganese (See Note 7)	Yes	9/21/2022	1,020	ug/l	N/A	MCL=300	Naturally occurring
Nickel	No	9/21/2022	1.5	ug/l	N/A	N/A	Naturally occurring
Zinc	No	9/21/2022	0.0507	mg/l	N/A	MCL=5	Naturally occurring
Color (See Note 8)	No	9/21/2022	15	Units	N/A	MCL=15	Presence of metals such as iron and manganese
<b>Disinfection Byproducts</b>							
Five Haloacetic Acids (HAA5)	No	8/26/2020	1.5	ug/l	N/A	MCL = 60	Byproduct of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes (TTHMs) see Note 6	No	8/26/2020	5.2	ug/l	N/A	MCL=80	Byproduct of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter.

**Notes:**

- 1 Milligrams per liter (mg/l) or parts per million (ppm).
- 2 Micrograms per liter (ug/l) or parts per billion (ppb).
- 3 Iron is essential for maintaining good health. However, too much iron can cause adverse health effects. Drinking water with very large amounts of iron can cause nausea, vomiting, diarrhea, constipation and stomach pain. These effects usually diminish once the elevated iron exposure is stopped. A small number of people have a condition called hemochromatosis, in which the body absorbs and stores too much iron. People with hemochromatosis may be at greater risk for health effects resulting from too much iron in the body (sometimes called “iron overload”) and should be aware of their overall iron intake. The New York State standard for iron in drinking water is 0.3 milligrams per liter, and is based on iron’s effects on the taste, odor and color of the water.
- 4 The level presented represents the 90<sup>th</sup> percentile of 8 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 and copper values detected at your water system. In this case, 8 samples were collected throughout the water system and the 90<sup>th</sup> percentile value was 1.6 ug/l for lead and 0.1020 mg/l for copper. The action levels for lead and copper were not exceeded in any of the sites tested.
- 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.
- 6 TTHM’s - chloroform, bromodichloromethane, dibromochloromethane, and bromoform
- 7 Manganese is a common element in rocks, soil, water, plants, and animals. Manganese occurs naturally in water after dissolving from rocks and soil. Contamination of drinking water may occur if manganese gets into surface or groundwater after dissolving from rocks and soil. It may also occur if manganese gets into surface or groundwater after improper waste disposal in landfills or by facilities using manganese in the production of steel or other products.  
Manganese is an essential nutrient that is necessary to maintain good health. However, exposure to too much manganese can cause adverse health effects. There is some evidence from human studies that long-term exposure to manganese in drinking water is associated with nervous system effects in adults (e.g., weakness, stiff muscles and trembling of the hands) and children (learning and behavior). The results of these studies only suggest an effect because the possible influences of other factors were not adequately assessed. There is supporting evidence that manganese causes nervous system effects in humans from occupational studies of workers exposed to high levels of manganese in air, but the relevance of these studies to long term drinking water exposure is less clear because the exposures were quite elevated and by inhalation, not by ingestion.
- 8 Color has no health effects. In some instances, color may be objectionable to some people at as low as 5 units. Its presence is aesthetically objectionable and suggests that the water may need additional treatment.

**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 water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect 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.

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

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

## **WHAT DOES THIS INFORMATION MEAN?**

The results of testing show that Manganese has been exceeded in our water supply. Manganese is a common element in rocks, soil, water, plants, and animals. Manganese occurs naturally in water after dissolving from rocks and soil. Contamination of drinking water may occur if manganese gets into surface or groundwater after dissolving from rocks and soil. It may also occur if manganese gets into surface or groundwater after improper waste disposal in landfills or by facilities using manganese in the production of steel or other products. Manganese is an essential nutrient that is necessary to maintain good health. However, exposure to too much manganese can cause adverse health effects. There is some evidence from human studies that long-term exposure to manganese in drinking water is associated with nervous system effects in adults (e.g., weakness, stiff muscles and trembling of the hands) and children (learning and behavior). The results of these studies only suggest an effect because the possible influences of other factors were not adequately assessed. There is supporting evidence that manganese causes nervous system effects in humans from occupational studies of workers exposed to high levels of manganese in air, but the relevance of these studies to long term drinking water exposure is less clear because the exposures were quite elevated and by inhalation, not by ingestion. The manganese greensand filters have been replaced and Manganese levels are currently non-detect.

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. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. 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 Woodbury is responsible for providing high quality drinking water, 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 or cooking with 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, 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 at <http://www.epa.gov/safewater/lead>.

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

Our system was in violation of exceeding a drinking water standard for manganese. Our system was in compliance with all other applicable State drinking water operating, monitoring and reporting requirements.

## **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?**

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 to get the most efficiency, 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 2022, the Village successfully installed one of two manganese greensand filters restoring treatment capability at the plant. Other upgrades to the Amdur Park Water Area treatment facility were performed including replacement of fencing around the lagoons.

## **WATER SUPPLY SECURITY**

Since the terrorist attacks on September 11, 2001, customers have expressed concerns with the security of their water supply. The Environmental Protection Agency and the FBI have stated it's highly improbable for the nation's drinking water to be compromised by terrorists. Nevertheless, we have implemented heightened security measures. The Village continues to review and implement cybersecurity measures to protect water supply. While we cannot disclose specific details, we can assure you we have strengthened the security of our water supply programs and law enforcement coordination. Security measures include:

1. Additional inspections of our system confirming locks, gates and fences are secure
2. Increased patrolling of our water supply facilities

3. Regular frequent sampling of our water supply and distribution system
4. Requesting public assistance in contacting police if suspicious individuals are seen near water facilities

As a first line of defense, we ask all of our customers to contact the Police Department at 845-928-2341 if you notice any suspicious activity in connection with any of the Village's water facilities (hydrants, reservoirs, wells, etc.)