Annual Drinking Water Quality Report for 2024
Pawling Water District #2 Water System
Mountainview Drive, Pawling, NY (Public Water Supply ID# NY1314504)

INTRODUCTION

To comply with State regulations, Pawling Water District #2 Water 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, we conducted tests for over 7 common contaminants, including Synthetic Organic Contaminants. We detected 3 of those contaminants, none were found to be at a level higher than the State allows. Additionally, we failed to monitor IOC's, Nitrate, Lead and Copper and Q2, Q3, Q4 Iron, Manganese as required by NYS drinking water code Part 5. 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 Kenny Sabia @ 914-489-4060. We want you to be informed about your drinking water.

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. To ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the number of certain contaminants in water provided by public water systems. The State Health Departments and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our system serves 243 people through 58 service connections. The water source is two drilled bedrock wells. One well is located on Mountainview Drive and the other well is in the recreation area by Willow Lake. All wells are located within our property boundary. In 2013, both wells were rehabilitated. The water obtained from our wells is disinfected with sodium hypochlorite and treated to reduce iron, manganese, and radon prior to distribution.

In May of 2003 a Source Water Assessment was conducted on our water system. This assessment estimates the potential for contamination of sources of drinking water, not finished water. This assessment contains information on Wells 1, 2, 3 and 4. This report in its entirety can be obtained via Dutchess County Department of Behavioral and Community Health at 845-486-3404 or from our H_2O Innovation Poughkeepsie office at 845-486-1030.

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, iron and manganese, lead and copper, primary inorganic compounds, principal organic compounds, synthetic organic compounds, disinfection byproducts, turbidity, synthetic organic contaminants and radiological. 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, is 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 Dutchess County Department of Behavioral and Community Health at (845) 486- 3404.

Table of Detected Contaminants

Contaminant	Violation (Yes/No)	Date of Sample	Level Detected (Avg/Max) (Range)	Unit of Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Gross Beta	No	12/27/2022	6.75	pCi/L	0		Decay of natural deposits and man-made emissions.
Nickel	No	11/17/2020	1.5	ug/L	N/A		Naturally Occurring in the environment.
Iron	Yes	7/6/2023	330	ug/L	300		Naturally Occurring in the environment.
Sodium	No	3/31/2023 6/30/2023	95.0	mg/L	N/A		Naturally occurring; Road salt; Water softeners; Animal waste.
Chloride	No	3/31/2023 6/30/2023	40	mg/L	N/A		Naturally occurring or indicative of road salt contamination.
Copper [4]	No	6/29/2023	170 (Range 81-180)	ug/L	AL	AL=1300 ug/L	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Copper [4]	No	12/14/23, 12/15/23, 12/19/23, 12/21/23	600 (Range 110-930)	ug/L	AL	AL=1300 ug/L	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Lead [5]	No	6/29/2023	1.9 (Range ND-14)	ug/L	AL	AL=15 ug/L	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead [5]	No	12/14/23, 12/15/23, 12/19/23, 12/21/23	4.8	ug/L	AL	AL=15 ug/L	Corrosion of household plumbing systems; Erosion of natural deposits.
Well #4 Perfluorooctanoic Acid (PFOA) Well #5 Perfluorooctanoic Acid (PFOA)	No	1/12/23 6/30/2023 9/30/2023 12/10/2024 12/10/2024	2.09 4.04 ND 3.6 1.2	ng/l	10	10	Released into the environment from widespread commercial and industrial applications.
Well #4 Perfluorooctanesulfonioc Acid (PFOS)	No	1/12/23 6/29/2023 9/30/2023 12/10/2024	0.902 1.18 ND 1.2	ng/l	10	10	Released into the environment from widespread commercial and industrial applications.

Table of Unregulated Contaminants				
Contaminant	Date of sample	Level Detected	Unit of Measurement	Likely Source of Contamination
Synthetic Organic contaminants Well #2				
Perfluorobutanoic Acid (PFBA), ng/L	3/15/22	1.06	ng/L	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites
Perfluorobutanesulfonic Acid (PFBS), ng/L	3/15/22 9/20/22	1.14 1.06	ng/L	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.
Synthetic Organic contaminants Well #4				
Perfluorobutanoic Acid (PFBA)	1/12/23 6/29/2023 9/30/2023 12/20/2023	1.23 2.35 ND 2.58	ng/L	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.
Perflouropentanoic Acid (PFPeA)	1/12/23 6/29/2023 9/30/2023 12/20/2023	1.08 1.2 ND 1.24	ng/L	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.
Perfluorobutanesulfonic Acid (PFBS)	1/12/23 6/29/2023 9/30/2023 12/20/2023	2.13 1.91 ND 12.6	ng/L	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.
Perfluorohexanoic Acid (PFHxA)	1/12/23 6/29/2023 9/30/2023 12/20/2023	1.19 0.655 ND 1.08	ng/L	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.
Perfluorohexanesulfonic Acid (PFHpA)	1/12/23 6/29/2023 9/30/2023 12/20/2023	ND 0.962 ND 1.10	ng/L	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites

Perflourooctanesulfonic acid (6:2FTS)	1/12/23 6/29/2023 9/30/2023 12/20/2023	1.08 0.984 ND 15.8	ng/l	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites
Synthetic Organic contaminants Well #5				
Perflourooctanesulfonic acid (6:2FTS)	6/29/2023 9/30/2023 12/20/2023	0.987 ND 6.01	ng/l	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites

Footnotes:

[1] The State considers 50 pCi/L to be the level of concern for beta particles.

[2] 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.

[3] Chloride is essential for maintaining good health. Research has not conclusively demonstrated that human exposure to chloride itself causes adverse health effects, although exposure to high levels of certain chloride salts has been associated with adverse health effects in humans. For example, high dietary intake of sodium chloride can be a contributing factor to high blood pressure, but this has been attributed mainly to the presence of sodium. The New York State standard for chloride is 250 milligrams per liter and is based on chloride's effects on the taste and odor of the water.

[4] 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 copper values detected at your water system. In this case, 10 samples were collected at your water system and the 90th percentile value is the reported value. The action level for copper was not exceeded at any of the sites tested.

[5] 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. In this case, 5 samples were collected at your water system and the 90th percentile value is the reported value. The action level for lead was exceeded at one of the 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.

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: Corresponds to one part of liquid in one trillion parts of liquid (parts per trillion - ppt).

What does this information mean?

As you can see by the table, our system had a violation for Iron. We remove Iron using sodium hypochlorite in order to get the Iron to precipitate out. We increased this dosage and continued to monitor. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State. We are required to present the following information on lead in drinking water.

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Pawling WD#2 is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact the Pawling WD#2. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.

Is our water system meeting other rules that govern operations?

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether your drinking water meets health standards. During 2023, we did not complete all monitoring or testing for Nitrate[1], Inorganic compounds[2], Iron[3], Manganese[4] and Synthetic Organic Contaminants[5] for Quarter 4. We also do not have results for Radiologicals[6] for well 5 in 2023. Therefore, we cannot be sure of the quality of your drinking water during that time. Please see the health effects of these contaminants below under “Do I need to take Special precautions”.

Information on Lead service line inventory

A Lead Service Line (LSL) is defined as any portion of pipe that is made of lead which connects the water main to the building inlet. An LSL may be owned by the water system, owned by the property owner, or both. The inventory includes both potable and non-potable SLs within a system. The Pawling WD#2 is in violation of the federal Lead and Copper Rule Revisions (LCRR) requirements for failing to provide a publicly accessible lead service line inventory.

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).

[1]Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

[2] Listed inorganic compounds are the following:

Antimony: Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.

Arsenic: Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system and may have an increased risk of getting cancer.

Barium: Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Beryllium: Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.

Cadmium: Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.

Chromium: Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.

Cyanide: Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.

Mercury: Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.

Nickel: Listed contaminant, no Health Effects

Selenium: Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

Thallium: Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.

Fluoride: Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

Bromate: Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.

Chlorite: Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.

[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]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.

[5]PFOA/PFOS caused a range of health effects when studied in animals at high exposure levels. The most consistent findings were effects on the liver and immune system and impaired fetal growth and development. Studies of high-level exposures to PFOA/PFOS in people provide evidence that some of the health effects seen in animals may also occur in humans. The United States Environmental Protection Agency considers PFOA/PFOS as having suggestive evidence for causing cancer based on studies of lifetime exposure to high levels of PFOA/PFOS in animals.

[6]Radiological Contaminants: Certain materials are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing alpha, beta, Uranium, and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.

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 several reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both 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 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 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.

Closing

While we have work to do, we want to thank you for allowing us to continue to provide your family with quality drinking water. We ask that all our customers help us protect our water sources. If you have any questions regarding the information presented in this report, please do not hesitate to contact H_2O Innovation at 845-486-1030. We are the operators of your water system and are here to answer any of your questions.