

# Town of Binghamton Water & Sewer Dept. 865 Hawleyton Rd. Binghamton, NY 13903

May 9, 2025

Dear Town of Binghamton Municipal Water User:

In order to comply with State and Federal regulations, it is necessary for the Town of Binghamton to issue an "Annual Drinking Water Quality Report for 2024" regarding the quality of our water.

Since we get our water directly from the City of Binghamton, we are attaching their "Annual Drinking Water Quality Report for 2024" for your information.

In addition, we are required to notify you of any detected contaminants in samples that we collected in the Town of Binghamton for the year 2024. Please see the "Table of Detected Contaminants" below. As you can see by the table, our system had no violations. During 2024, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements. During lead testing in 2022, we did not have any home testing above the Action Level of 15 ug/l. However, we are required to inform you about lead with the following statement.

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 City of Binghamton is 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 water for drinking or cooking. 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 from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

The Town of Binghamton takes great strides to ensure safe and healthy drinking water. We want to ensure you that the water in your home is safe. We conduct water sample testings each month in all of our water districts. We will continue to conduct these tests on a routine basis to ensure safe drinking water.

If you require any further information regarding this matter, you may contact Mark Leighton in the Town of Binghamton Water Department by calling 669-4323.

Sincerely,

Mark Leighton, Water Dept.

Town of Binghamton Table of Detected Contaminants

The Town of Binghamton is an equal opportunity employer and provider.

TOWN	OF E	INGHA	MTON	TABLE O	F DET	ECT	ED C	ONTAMINANTS
Contaminant	Violation Yes/No	Sample Location	Date of Sample	Level Detected (range)	Unit Measure- ment	MCLG	MCL	Likely Source of Contamination
Inorganic Contami	nants							
Lead <sup>2</sup>	No	Distribution	9/13/22	1.0 (ND - 1.1)	ug/i	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits.
Copper <sup>2</sup>	No	Distribution	9/13/22	0.0808 (0.0060 - 0.111)	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Disinfection Bypro	ducts							
Total Trihalomethanes <sup>4</sup>	No	Distribution	2024 Quarterly	40.9 (21.9 - 56.8)	ug/l	N/A	80	By-product of drinking water chlorination.
Total Haloacetic Acids <sup>5</sup>	No	Distribution	2024 Quarterly	16.9 (8.6 - 35.5)	ug/l	N/A	60	By-product of drinking water chlorination.
Notes:	-							
2	indicates t	he percent of	a distributio		r below it.			is a value on a scale of 100 that e is equal to or greater than 90% of
4				running annual avooromethane, brom		he range	of the fo	llowing contaminants: chloroform,
5								llowing contaminants: acid, dibromoacetic acid.
Definitions:								
	inant Lev	el (MCL): Th	ne highest	level of a contan	ninant that	is allow	ed in dri	nking water MCLs are set as
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.								
		centration of	a contami	nant which, if exc	ceeded, tri	ggers tr	eatment	or other requirements which a
water system mus								
Non-Detects (ND)								
								per million - ppm).
Micrograms per lit	er (ug/I): (	orresponds	to one par	τ of liquid in one	Dillion par	is of liqu	ud (parts	s per billion - ppb).

## **Annual Water Quality Report**

Annual Water Quality Report for 2024
Binghamton Water Department
Binghamton, New York 13903
Public Water Supply ID# NY0301651

### INTRODUCTION

In compliance with State and Federal regulations the BINGHAMTON WATER DEPARTMENT issues an annual report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and of the need to protect our drinking water sources. In 2024, we conducted tests for over 140 contaminants for each of our two sources. Our primary source is the Susquehanna River and our back-up source is a well. Water produced from both sources was below maximum contaminant levels for all monitored constituents. Monitoring samples taken from the distribution system were in compliance with State standards. 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 concerning this report or your drinking water, please contact the **Water Department at** (607) 772-7210 during normal business hours. We want you to be informed about your drinking water and we would be happy to discuss any drinking water issues with you by phone or in person.

### 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 of New York and the Environmental Protection Agency prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Health Department and Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Our primary source of water is the Susquehanna River, from which water is withdrawn and treated at a modern, recently renovated water filtration facility. We also have a back-up groundwater supply: a well of relatively small capacity compared to our normal water demand. The well is typically exercised 8 hours per week, and thus supplies less than one-half of one percent of our water. Water pumped from the well is chlorinated before entering the water distribution system.

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 impact the water at the intake. 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 the contaminants that have been detected. While nitrate and other inorganic contaminants were detected in our surface and ground water source, 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 from natural sources. The presence of contaminants does not necessarily indicate that the water poses a health risk.

### SURFACE WATER ASSESSMENT (SUSQUEHANNA RIVER)

A surface water assessment found an elevated susceptibility to microbial contamination for this source of drinking water. The amount of pastureland in the assessment area results in a high potential for protozoa contamination. While there are some facilities present, permitted discharges do not likely represent an important threat to source water quality based on their density in the assessment area. In addition, it appears that the total amount of wastewater discharged to surface water in this assessment area is high enough to further raise the potential for contamination, particularly for protozoa. There is not any likely contamination threats associated with other discrete contaminant sources, even though discharge contaminants from some facilities were found in low densities. Finally, it should be noted that relatively high flow velocities (i.e. spring floods) make river drinking water supplies highly sensitive to existing and new sources of microbial contamination.

### GROUND WATER ASSESSMENT (OLMSTEAD WELL)

A ground water assessment has rated the Olmstead Well as having a high susceptibility to nitrate and microbial contamination, specifically enteric bacteria, enteric viruses and protozoa. These ratings are due primarily to the proximity of the well to permitted discharge facilities (industrial/commercial and municipal facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) and private sewage disposal, septic systems and agricultural activities in the upstream area. The well is also rated highly susceptible to chemical contaminants because of several contaminant sources identified in the assessment area and a history of low-level chemical contamination, specifically organic compounds. These ratings are also warranted because the well is relatively shallow and draws from an unconfined productive aquifer that may not provide adequate protection from potential contamination. Please note that as stated above, the Olmstead Well contributes a very limited amount of water to the total amount used in the system. While the source water assessment rates our surface water and ground water sources as being moderately to highly susceptible to microbial contamination, 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.

County and state health departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and education programs.

### FACTS AND FIGURES

Our water system serves 44,564 people through 13,681 service connections in the City, and wholesales water to parts of the Towns of Binghamton, Dickinson, and Vestal. The total amount of water pumped out of our production facilities in 2024 was 1,473,201,700 Gallons. The daily average for the year was 4.036 million gallons per day with our highest daily production being 6,719,600 gallons pumped on January 6<sup>th</sup>. The amount of water billed to all customers was 1,185,928,568 gallons. We attribute the remaining 287,273,132 gallons of water used by the city for firefighting, parks, non-revenue miscellaneous usage, pools and street flushing, a biannual hydrant flushing/flow testing program, and water main breaks and leakage. In 2024, the minimum combined water/sewer bill was \$89.75 three times a year. This provides 3,740 gallons of water and sewer usage.

### ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. The contaminants included are: total coliform bacteria (for microbiological quality), turbidity, inorganic group compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, synthetic organic compounds, and miscellaneous chemical compounds. The contaminants detected in your drinking water are included in the **Table of Detected Contaminants**.

During 2024, the Binghamton Water Plant performed 742 (600 required by regulations) microbiological tests for coliform in the distribution system. There were no microbiological standard violations. Over 140 other contaminants were tested for during the year with the majority **not being detected**. A complete listing of contaminants we tested for during 2024 is available for inspection at the Water Plant during normal business hours. In the **Table of Detected**Contaminants is a listing of detected contaminants. All have concentrations below the state regulated maximum contaminant level (MCL).

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, could be more than one year old.

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 at (800) 426-4791, or the Broome County Health Department at (607) 778-2887. Also, the National Sanitation Foundation is a nongovernmental source of free information on water quality issues, with a toll-free consumer hotline at (877) 8NSF-HELP.

### **DEFINITIONS OF TERMS USED IN TABLE**

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 residual that is allowed in drinking water.

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 that, if exceeded, triggers treatment or other requirements that a water system must follow.

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

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

Nephelometric Turbidity Unit (NTU): Turbidity is a measure of the clarity of the water. We use this test as an indication of the effectiveness of the filtration system as a whole. State regulations in force during 2014 require that our effluent (water leaving the plant) is always below 1.0 NTU, and 95% of the turbidity samples collected from our individual filters must have measurements below 0.3 NTU. These samples from the filters are collected every fifteen minutes utilizing our SCADA system and turbidity monitors located at each filter. 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 ( $\mu$ g/L): Corresponds to one part of liquid in one billion parts of liquid (parts per billion — ppb).

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

Locational Running Annual Average (LRAA): The average result of four consecutive quarterly compliance chemical testing series at any one location.

## **Table of Detected Contaminants**

-	Contaminant	Violation	Date (Last Tested)	Level Detected (Range)	Unit	MCLG	Regulatory Limit MCL	Likely Source of Contaminant
	Microbiological Contaminants							

Coliform Bacteria	Dist. System	No	Daily	Negative	N/A	0 .	Any Positive Sample	Naturally present in the environment.
			ln	organics				
Barium	Plant Well	No	8/16/2023 1/6/2021	0.0166 0.0616	· μg/L	2	. 2. . 2.	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	Plant Well	No	Daily 1/19/21	(0.10 – 0.88) 0.170	mg/L	1.0	2.2	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	Plant Well	No	12/19/2024 12/19/2024	0.55 2.4	mg/L	10	10 .	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	Plant Well <sup>1</sup>	No	6/2/2017 6/5/2024	18.4 111	mg/L	N/A	None	Naturally occurring; Road salt; Water softeners; Animal waste.
			Emerging	g Contamina	nts			
1,4-Dioxane	Plant Well	No	Yearly	ND 0.026	μg/L	N/A	1.0	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.
PFOS	Plant Well	No	Quarterly	ND – 1.9 5.0 – 7.0	ng/L	N/A	. 10	Released into the environment from widespread use in commercial and industrial applications.
PFOA	Plant Well	No	Quarterly	ND 1.9 3.0 6.5	ng/L	N/A	10 	Released into the environment from widespread use in commercial and industrial applications.

	and the state of t	yarana a a a a a a a a a a a a a a a a a	<del>ny ana ao ao</del>	Andrew Compared the Contract	The second second		Transfer (18 Year to the law of t	
Total Organic Carbon (TOC)		No ·	Monthly Raw Fin	1.4 – 3.6 <1.0 – 2.4	mg/L	N/A	35%	Naturally present in the environment. Precursor to disinfection by products.
TOC Percent removal		No .	Monthly totals	31.4 – 72.2	49.96% yearly avg	N/A	35% Yearly Avg.	Greater or equal to 35% removal.
Total Trihalomethanes <sup>1</sup>	Distribution System	No	Quarterly	39.1 (4.6 – 83.7)	μg/L	N/A	. 80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter.
Haloacetic Acids <sup>2</sup>	Distribution System	No	Quarterly	16.8 (2.0 – 33.4)	μg/L	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms.
Chlorite	In House 2023 Plant Distribution System 2024 Well	No	Daily Lo/Hi Yearly Quarterly Yearly	0.012 – 0.468 97.4 <10 <10	mg/L μg/L	N/A	1.0 10	By-product of drinking water disinfection at treatment plants using chlorine dioxide,
Chlorine Dioxide	Plant Average Daily High	No	Average 7/31/2023	0.094 .279	mg/L	N/A	0.8	Chemical used in taste and odor control at the Water Filtration Plant.
Sodium Hypochlorite Distribution	Running Annual Average Daily High	No	Average 09/12/2024	1.105 1.86	mg/L	N/A	4,0	Water additive used to control microbes.
		Harden Agent State Comments of	Rac	liological				д се и под при на п На при на пр
Uranium	Plant Well	No	4/27/2022	0.262 <u>.</u> 0.262	μg/L	O	15	Erosion of natural deposits.
Gross Alpha	Plant Well	No	<b>4/27/2022</b>	1.66 2.58	pCi/L	0	15	Erosion of natural deposits.
Gross Beta	Plant Well	Ņo	4/27/2022	1.97 1.78	pCi/L	0	. 50	Decay of natural deposits and man-made emissions.
Radium 226	Plant Well	No	4/27/2022	.503 .872	pCi/L	0	5	Erosion of natural
Radium 228	Plant Well	No	4/27/22	0.789 0.851	pCi/L	0	5	deposits.

#### **Health Effects**

- **Total Coliform Bacteria** Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution.
- **Barium** Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
- **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.
- **Nitrate** Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.
- **Sodium** 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.
- **1,4 Dioxane** Laboratory studies show that 1,4-dioxane caused liver cancer in animals exposed at high levels throughout their lifetime. Whether 1,4-dioxane causes cancer in humans is unknown. The United States Environmental Protection Agency considers 1,4-dioxane as likely to be carcinogenic to humans based upon studies of animals exposed to high levels of this chemical over their entire lifetimes.
- PFOS 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 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 PFOS as having suggestive evidence for causing cancer based on studies of lifetime exposure to high levels of PFOS in animals.
- **PFOA** PFOA 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 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 as having suggestive evidence for causing cancer based on studies of lifetime exposure to high levels of PFOA in animals.
- **Total Organic Carbon** Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.
- **Total Trihalomethanes TTHMs** Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
- **Haloacetic Acids HAA5** Some people who drink water containing haloacetic acids 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.
- Chlorine Dioxide Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.
- **Sodium Hypochlorite** Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
- Uranium Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer.
- **Gross Alpha** Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
- **Gross Beta** Certain materials are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Radium 226/228 — Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

#### \*Notes

- 1 This level represents the highest locational running annual average and the range of the following contaminants: Chloroform, Bromodichloromethane, Dibromochloromethane & Bromoform.
- 2 This level represents the highest locational running annual average and the range of the following contaminants: Monochloroacetic Acid, Monobromoacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid & Dibromoacetic Acid.

### UNREGULATED CONTAMINANT MONITORING

The 1996 amendments to the Safe Drinking Water Act (SDWA) require that once every five years, the U.S. Environmental Protection Agency (EPA) issue a new list of no more than 30 unregulated contaminants monitored by public water systems (PWSs). The Unregulated Contaminant Monitoring Rule (UCMR) provides EPA and other interested parties with scientifically valid data on the occurrence of contaminants in drinking water. Unregulated contaminants are those that don't yet have a drinking water standard set by US EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard.

The following unregulated contaminants were detected in our water system during 2024:

Contaminant	Level Detected	Unit Measurement	Likely Source of Contamination
Total Organic Carbon	1.0 – 3.60	mg/L	Naturally occurring. Tested as a precursor of disinfection byproducts.
Bromide	ND – 0.026	mg/L	Naturally occurring. Tested as a precursor of disinfection byproducts.
Haloacetic Acids*	· 5.80 – 41.1	μg/L	By-product of drinking water disinfection needed to kill harmful organisms.
Manganese .	0.0093 – 0.074	mg/L	Source is erosion of natural deposits.

<sup>\*</sup> These levels represent the total levels of the following contaminants: Monochloroacetic Acid, Monobromoacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Dibromoacetic Acid, Bromochloroacetic Acid, Bromochloroacetic Acid, Chlorodibromoacetic Acid, Tribromoacetic Acid.

## Unregulated Perfluoroalkyl Substances

Contaminant	Violation (Yes/No)	Date of Sample	Level Detected	Unit Measurement	MCLG or Health Advisory Level <sup>1,2</sup>
Perfluorobutenesulfonic Acid (pfbs)	No	12/04/2024	2.8	ng/L	2,000 ng/L

Perfluorohexanoic Acid	No	03/27/2024	3,3	ng/L	na
(pfhxa)					

#### \*Notes

- 1 USEPA Health Advisory Levels identify the concentration of a contaminant in drinking water at which adverse health effects and/or aesthetic effects are not anticipated to occur over specific exposure durations. Health Advisory Levels are not to be construed as legally enforceable federal standards and are subject to change as new information becomes available.
- 2 All perfluoroalkyl substances beside PFOA and PFOS, are considered Unspecified Organic Contaminants (UOC) which have an MCL = 0.05 mg/L = 50,000 ng/L

### LEAD AND COPPER

In 1994, the City of Binghamton conducted a corrosion optimization study to reduce lead and copper levels in your tap water. The report and study were approved by the New York State Department of Health and the City's corrosion control was deemed optimized. Follow up testing in 1996 and 1999 reaffirmed the study's findings. The City of Binghamton has optimized corrosion control treatment and had previously been monitoring on a reduced schedule (once every three years). Over the past 30 years the original sampling list has become a challenge due to people moving or no longer willing to participate in the sampling program. As a result, starting in 2024 the City of Binghamton is required by EPA to move back to a 6-month sampling schedule with an increased number of samples until there is consistent enough participation demonstrating that levels are consistently low enough to move back to a reduced number of samples and sampling frequency.

2024 Lead/Copper Results	Violation Yes/No	Date of Sample	Range Results	90 <sup>th</sup> %tile Results	Unit	MCLG	Reg. Limit 90 <sup>th</sup> %tile Action Level
Lead	No	2024	<0.0010 – 0.0099>	0,0013	mg/L	. 0	0.010
Copper	No	2024	<0.0083 0.2170>	0.0921	mg/L	1.3	1.3

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. The City of Binghamton is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing of 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 City of Binghamton at (607) 772-7210. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <a href="https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water">https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water</a>.

The City was only able to collect 57 of the 60 Lead and Copper samples required due to lack of participation. As some of your neighbors may attest to, we sent out 136 requests and have been going out door to door in an attempt to recreate a viable candidate list of 60 homes that are willing to participate in this sampling program. We were not able to take all lead and copper samples at required locations since some homeowners did not provide property access as requested — we take the health of all City residents seriously and need a broad sample set to ensure we maintain our high-water quality standards. We are looking for additional volunteers to allow us to sample in your home twice a year. If you would like more information, please contact (607) 772-7210.

As a result of the optimization report, other parameters are monitored to ensure that our water quality remained within the guidelines of the study. These parameters are known as Water Quality Parameters. During 2024 we collected samples that pertained to the study, and the results are compiled below.

Parameter	High Level (mg/L)	Low Level (mg/L)	Mean (mg/L)
Alkalinity (as CaCO3)	93.8	29.2	57.5
Specific Conductance	346	149	244.1
Calcium Hardness (as CaCO3)	88.1	34.5	58,2
Orthophosphate (as PO4)	0.250	0.050	0.101
РН	7.80	6.90	7.35
Temperature	83° F	32° F	57.5° F

## INFORMATION ON THE ADDITION OF FLUORIDE

Our system is one of many in New York State that provides drinking water with a controlled, low level of Fluoride for consumer dental health protection. Fluoride is added to your water by the Water Filtration Plant and is monitored no less than every four hours by water plant operators and laboratory personnel. According to the Center for Disease Control, Fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.6 – 0.8 mg/L. During 2023 monitoring showed Fluoride levels in your water were in the optimal range 100% of the time.

### WHAT DOES THIS INFORMATION MEAN?

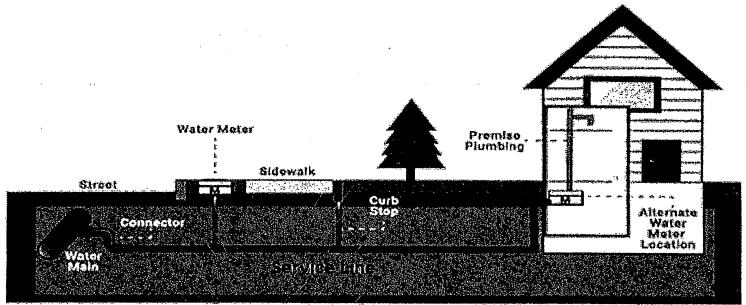
As you can see by the table, our system had Zero MCL violations in 2024. We also learned through our testing that some other contaminants have been detected; however, these contaminants were detected below the level allowed by the State, as indicated in the table.

There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavioral problems. The children of persons who are exposed to lead before or during pregnancy may be at increased risk of these health harmful health effects. Adults have increased risk of heart disease, high blood pressure, kidney or nervous system problems. Contact your healthcare provider for more information about your risks.

### WATER SERVICE LINE INVENTORY FOR THE CITY OF BINGHAMTON

Under the 2021 Lead and Copper Rule Revisions (LCRR), the U.S. Environmental Protection Agency (EPA) is requiring water systems to provide customers with specific information about their water service lines.

A service line is the pipe connecting the City water main to a building. A typical configuration of a service line is shown in the figure below. The City of Binghamton owns from the water main to the curb stop, a shutoff valve located in front of the building. The property owns from the curb stop to the building.



Example of a Service Line. If any section of the service line is made of lead, the service line is classified as a lead service line.

In response to the <u>updated EPA regulations</u>, the City of Binghamton Water & Sewer Department has been working to create a lead service line inventory for all City properties based on available information. The City needs additional help identifying service lines — please click here to <u>Let Us Know About Your Water Pipes</u>.

A link to the lead service line inventory <u>can be found here</u>. Property owners can use the search function to find their address.

This information is intended to notify consumers of whether the water they are receiving has been delivered through a lead, galvanized requiring replacement (GRR), or lead status unknown service line, and help owners and/or occupants make decisions on what actions to take to reduce their potential exposure to lead in drinking water.

For additional information, residents may contact the Binghamton Water & Sewer Department at (607) 772-7210.

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

During 2024, our system was in substantial compliance with applicable State and Federal drinking water operating, monitoring and reporting requirements with the exception of Lead and Copper sampling as discussed above. During the period of July — December 2024, we did not complete all monitoring or testing and therefore cannot be sure of the quality of your drinking water during that time. However, based on available samples, the results show the City is in compliance with EPA standards and there is no action that you need to take at this time. We want our customers to be aware of how we are improving our practices to ensure that the city continues to provide you a source of safe and reliable drinking water.

An updated list of sampling locations was submitted in April 2024 as requested by EPA, however not all homeowners provided access for sampling. We are seeking the assistance of City residents for future sampling events to help us stay in compliance and help protect the health of our community.

If you have additional questions about any of the above information, please contact:

- Broome County Department of Health (Broome County DOH) at (607) 778-2847
- 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. In accordance with the federal Lead and Copper Rule Revisions (LCRR) our system has prepared a lead service line inventory and have made it publicly accessible by going to City Hall, 2<sup>nd</sup> floor where you pay your water bills and/or visiting our website at <a href="https://www.binghamton-ny.gov/government/departments/water-sewer/water-service-line-inventory">https://www.binghamton-ny.gov/government/departments/water-sewer/water-service-line-inventory</a>.
- Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

### 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 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 several 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.
- 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 aware 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. Partial loads waste money. Fill it to capacity prior to each run.
- 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. Repair these fixtures 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, and then check the meter after 15 minutes. If it moved, you have a leak.

### SYSTEM IMPROVEMENTS

- The Water Meter Department Cleared 5225 service orders both in the field and office level actions. 583 of them
  direct meter replacements in addition to meter reading and leak detection services. We have begun increasing the
  number of radio read water meters including most of our larger buildings and complexes. The Department
  currently tracks and maintains records for 750 Back Flow Cross Connection devices located in the City of
  Binghamton and we have several employees certified for back flow testing which take care of our in-house devices.
- The Water Distribution Department replaced 4 hydrants, repaired 15 main breaks replaced 5 water services and over 33 feet of new water main including 9 gate valves and 3 curb stops in addition to standard duties and street

reconstruction projects. We also respond to numerous service calls and many late nights and after hour repairs.

Our Street utility and reconstruction work included over 2000' of new water main ranging from 6" - 12" diameters. 25 new and replaced water service lines. 20 new fire hydrants. 76 new system gate valves. These replacements help us continue to serve our community for years into the future.

### IN CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us to protect our water sources, which are the heart of our community. Please feel free to call the Water Department office for any questions concerning this report or additional information concerning your water.

We also ask for your help in maintaining security at any of our unmanned remote facilities. If you ever have any concerns with vandalism or suspicious behavior around any City of Binghamton Water facility, please call the Water Department at (607) 772-7221 or the Binghamton Police Department at (607) 723-5321.