WD 2,6,7,8

NEW YORK STATE DEPARTMENT OF HEALTH
Bureau of Water Supply Protection

Annual Water Quality Report Certification Form

Water System Name: Town of Dickinson

Public Water Supply ID #: NY0301664 NY0311222 NY0310143 NY0322837

The community water system named above hereby confirms that its Annual Water Quality Report (AWQR) has been distributed to customers and appropriate notices of availability have been given. Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the health department.

Certified by: Name: MATT Fitzpatrick

Title: Water operator

Phone #: (607) 743-1746 Date: 5-30-24

Please indicate how your report was distributed to your customers:

☑ AWQR was distributed to bill-paying customers by mail.

☐ AWQR was distributed by other direct delivery method(s) (check all that apply)

- ☐ Hand delivered.
- ☐ Published in local paper (i.e., *Penny Saver*) that was directly delivered or mailed to all bill-paying customers.
- ☐ Published in local municipal newsletter that was directly delivered or mailed.
- ☐ Mailed a notification that AWQR is available on a public website via a direct URL
- ☐ Emailed with a message containing a direct URL link to the AWQR
- ☐ Emailed with AWQR sent as an attachment to the email
- ☐ Emailed with AWQR sent as an embedded image in the email
- ☐ Additional electronic delivery that meets "otherwise directly deliver" requirement
- ☐ Other (please specify) _____

☐ System does not have bill-paying customers.

☐ *For systems serving at least 100,000 persons*: in addition to direct delivery to bill-paying customer the AWQR was posted on a publicly-accessible website at *www.*_____

Please indicate what "Good Faith" efforts were used to reach non-bill paying consumers (check all that apply).

- ☑ Posting the Annual Water Quality Report on the Internet at www. Town of Dickinson.com
- ☐ Mailing the Annual Water Quality Report to postal patrons within the service area
- ☐ Advertising the availability of the Annual Water Quality Report in the news media
- ☐ Publication of the Annual Water Quality Report in a local newspaper
- ☐ Posting the Annual Water Quality Report in public places (attach a list of locations)
- ☐ Delivery of multiple copies to single-bill addresses serving several persons such as: apartments, businesses, and large private employers
- ☐ Delivery to community organizations
- ☑ Other (please specify) Townhall

NEW YORK STATE DEPARTMENT OF HEALTH
Bureau of Water Supply Protection

INSTRUCTIONS

Annual Water Quality Report Certification Form

Community Water Systems must submit this Certification Form **by September 1st** of each year to the New York State Department of Health in Albany, NY and to the county or district health department office that has jurisdiction over the water system.

The certification must indicate how the water systems Annual Water Quality Report (AWQR) was distributed and that the information within the AWQR is correct and consistent with the compliance monitoring data previously submitted to the overseeing health department.

A copy of the AWQR (by 5/31/2024) and this Certification Form (by 9/1/2024) shall be submitted to the New York State Department of Health in Albany:
By mail to:

NYS Department of Health
Corning Tower, Room 1110
Empire State Plaza
Albany, NY 12237

Or electronically to:

AWQR@health.ny.gov

A copy of the AWQR (by 5/31/2024) and this Certification Form (by 9/1/2024) shall also be submitted to the Broome County Health Department:

Peter Haff (until 5/30/2024)/Justin Lewis (after 5/30/2024)
Grouudwater Management Specialist
Broome County Health Dept.
225 Front Street
Binghamton, NY 13905

Fax: 607-778-3912

Peter.Haff@broomecountyny.gov
Justin.Lewis@broomecountyny.gov

Systems serving 1,000 or more service connections are required to send copy of AWQR (by 5/31/2024) to:

NYS Department of Euvironmental Conservation
Attn: Director, Bureau of Water Permits
625 Broadway
Albany, NY 12207

Annual Drinking Water Quality Report for 2023
Town of Dickinson Water Districts #2, #6, #7, #8
Town of Dickinson
523-531 Old Front Street
Binghamton, New York 13905
(Public Water Supply ID#NY0301664)
(Public Water Supply ID#NY0311222)
(Public Water Supply ID#NY0310143)
(Public Water Supply ID#NY0322837)

INTRODUCTION

To comply with State regulations, Town of Dickinson, will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. 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 the Town of Dickinson, phone 607/771-0771. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Town board meetings. The meetings are held at the Town Hall on the 2nd Monday of each month at 6 PM.

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 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 Town of Dickinson Water Districts #2, #6, #7, #8 purchase their water from the City of Binghamton, which draws its water from the Susquehanna River. See attached Annual Water Quality Report from the City of Binghamton.

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, lead & copper, and disinfection byproducts. 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 Broome County Health Department at 778-2887.

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 did not detect lead in any of our samples, however 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. 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. We strive to provide 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.*

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2023, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as 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).

INFORMATION ON THE ADDITION OF FLOURIDE

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 Binghamton Water Filtration Plant before it is delivered to us 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 level of 0.7 mg/l. During 2023, monitoring showed Fluoride levels in your water were in the optimal range of 0.6 to 0.8 mg/l 100 % of the time. At no time in 2023 did the Fluoride level exceed the MCL of 2.2 mg/l.

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 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 house holds 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 f 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 up 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

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 protect our water sources, which are the heart of our community. Please call our office if you have questions.

TABLE OF DETECTED CONTAMINANTS - Dickinson WDs #2, #6, #7 & #8

Contaminant	Violation Yes/No	Sample Location	Date of Sample	Level Detected (range)	Unit Measure-ment	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants								
Copper[2]	No	Distribution	Jun-22	0.0633 (0.0070-0.0796)	mg/l	0	AL=1.3	Corrosion of household plumbing systems, Erosion of natural deposits; leaching of wood preservatives
Lead[2]	No	Distribution	Jun-22	ND (ND)	ug/l	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits; .
Disinfection Byproducts								
Total Trihalomethanes[3]	No	Distribution	7/21/2023	56.1	ug/l	N/A	80	By product of drinking water chlorination
Haloacetic Acids[4]	No	Distribution	7/21/2023	30.8	ug/l	N/A	60	By product of drinking water chlorination

Notes:

2	The level presented represents the 90th percentile of the 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 prcentile is equal to or greater than 90% of the lead/copper values detected at your water systems.
3	This level represents the total levels of the following containments: Chloroform, Bromodichloromethane, Dibromochloromethane, Bromoform & Chlorodibromomethane.
4	This level represents the total levels of the following containments: Monochloracetic Acid, Monobromoacetic Acid, Dichloroacetic Acid, Trichloracetic Acid, & Dibromoacetic Acid.

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.

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).

Annual Water Quality Report for 2023
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 2023, 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 @ 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 2023 was 1,485,114,400 Gallons. The daily average for the year was 4.1 million gallons per day with our highest daily production being 8,374,400 gallons pumped on January 6th. The amount of water billed to all customers was 1,107,109,564 gallons. We attribute the remaining 378,000,000 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 2023, the combined minimum water / sewer bill was $89.00. 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 2023, the Binghamton Water Plant performed 718 (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 2023 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. MCL's are set as close to the MCLG's 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. MCLG's 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. MRDLG's 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 (ug/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	LEVEL DETECTED (Range)	UNIT	MCLG	Regulatory Limit MCL	LIKELY SOURCE OF CONTAMINANT
Microbiological Contaminants							
Coliform Bacteria (*) Distribution	NO	Daily	Positive	N/A	0	Any Positive Sample	Naturally present in the environment.
Inorganics							
arium Plant Well	NO	8/16/2023 (1/6/21)	0.0166 0.0616	Ug/L	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride Plant (*4) Well	NO	Daily 1/19/2021	(0.10–0.88) 0.17	mg/L	1	2.2	Additive for good dental health and erosion of natural deposits
itrate Plant Well	NO	12/20/2023 12/20/2023	0.3 2.6	mg/L	10	10	Runoff from fertilizer, runoff from septic tanks, sewage, natural erosion
dium Plant Well (*1)	NO	6/2/2017 4/27/2022	18.4 91.9	mg/L	N/A	None	Natural in soil, road salt, water softeners
Emerging Contaminants							
1,4 Dioxane Plant Well	NO	Yearly	ND 0.04	ug/L	N/A	1	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.
PFOS Plant Well	NO	quarterly	ND 5.0-5.3	ng/L	N/A	10	Released into the environment from widespread use in commercial and industrial applications.
PFOA Plant Well	NO	quarterly	ND 3.0-3.6	ng/L	N/A	10	Released into the environment from widespread use in commercial and industrial applications.
Disinfection By Products							
otal Organic Carbon (TOC)	NO	Monthly Raw Fin	1.7 - 5.3 1.1 - 2.4	mg/L	N/A	35%	Precurser to disenfection by products
OC Percent removal	NO	Monthly totals	31.0 - 60.7	49.96% yearly avg	N/A	35% Yearly AVG	Greater or equal to 35% removal
otal Trihalomethanes (*2) Distribution system	NO	Quarterly	39.1 (4.6 -83.7)	ug/L	N/A	80	Byproduct of disinfection. TTHMs form when chlorine meets organic matter.
aloacetic Acids (*3) Distribution system	NO	Quarterly	16.8 (2.0-33.4)	ug/L	N/A	60	By product of disinfection. HAA5s form when chlorine meets organic matter.
lorite In House Plant istribution System Well	NO	Daily Lo/Hi Yearly Quarterly Yearly	0.012 – 0.468 97.4 <10 <10	mg/L ug/l	N/A	1 10	By product of in-plant generation of chlorine dioxide

hlorine Dioxide Plant Average Daily High	NO	Average 7/31/2023	0.094 0.279	mg/L	N/A	0.8	Chemical used in taste and odor control at the Water Filtration Plant.
odium Hypochlorite)istribution Running Annual Average Daily High	NO	Average 2/14/2023	1.12 1.97	mg/L	N/A	4	Chemical used in the disinfection of drinking water (as Free Chlorine)
Radiological							
anium Plant Well	NO	4/27/2022	0.262 0.262	Ug/L	0	15	Erosion of natural deposits
oss Alpha Plant Well	NO	4/27/2022	1.66 2.58	pCi/L	0	15	Erosion of natural deposits
oss Beta Plant Well	NO	4/27/2022	1.97 1.78	pCi/L	0	50	Decay of natural deposits and man-made emissions
dium 226 Plant Well	NO	4/27/2022	0.503 0.872	pCi/L	0	5	Erosion of natural deposits
dium 228 Plant Well	NO	4/27/2022	0.789 0.851	pCi/L	0	5	

* Notes:

1 – 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.

2 - This level represents the highest locational running annual average and the range of the following contaminants: Chloroform, Bromodichloromethane, Dibromochloromethane & Bromoform.

3- 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 2014 and 2015:

Contaminant	Level Detected	Unit Measurement	Likely Source of Contamination
Strontium	66.3-194	ug/l	Source is erosion of natural deposits.
Chromium	0.23-0.53	ug/l	Discharge from steel and pulp mills, pigments, leather tanning; Erosion of natural deposits.
Chromium-6	ND-0.28	ug/l	Discharge from steel and pulp mills, pigments, leather tanning; Erosion of natural deposits.
Cobalt	ND-1.5	ug/l	Erosion of natural deposits
Chlorate	21-339	ug/l	Disinfection byproduct; Used in the production of chlorine

			dioxide
1,4-dioxane	ND-0.077	ug/l	Primarily used as a stabilizer for trichloroethane. Also used in a variety of applications as a solvent such as in inks and adhesives.

The following unregulated contaminants were detected in our water system during 2022 and 2023:

Contaminant	Level Detected	Unit Measurement	Likely Source of Contamination
Total Organic Carbon	1.00 – 8.30	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*	2.00 – 33.4	ug/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.

* These levels represent the total levels of the following contaminants: Monochloroacetic Acid, Monobromoacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Dibromoacetic Acid, Bromochloroacetic Acid, Bromdichloroacetic Acid, Chlorodibromoacetic Acid, Tribromoacetic Acid

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 has had monitoring reduced to once every three years by the New York State Department of Health.

2022 Lead/Copper Results	Violation Yes/No	Date of Sample	Range Results	90th %tile Results	Unit	MCLG	Reg. Limit 90th %tile Action Level
Lead	No	2022	<0.010 – 0.089>	0.0031	mg/L	0	**0.015**
Copper	No	2022	**<0.0042 – 0.2640>**	**0.1270**	mg/L	1.3	**1.3**

In 2024 The City of Binghamton will be beginning the Lead and Copper sampling program from the ground up to comply with EPA regulations and testing. Only Tier one single family homes constructed between 1982 – 1986. Over the past 30 years we have drifted away from the original list due to people moving or no longer willing to participate in the sampling program. As some of your neighbors can attest to we have begun going out door to door in an attempt to recreate a viable candidate list of 60 homes all tier one all willing to participate. Beginning Spring 2024 this will require two sets of tests 6 months apart depending on the results of those samples we will begin to reveal our path forward once more.

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.

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 2023 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)	73.8	10.9	48.7
Specific Conductance	2606	125	292.2
Calcium Hardness (as CaCO3)	78.4	22.9	47.8
Orthophosphate (as PO4)	0.21	0.012	0.114
PH	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 2023. 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.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2023, our system was in substantial compliance with applicable State and Federal drinking water operating, monitoring and reporting requirements.

In the summer of 2023, the EPA did a full inspection of the City of Binghamton's Water Filtration Plant. They went over daily operational reports from 2021 and 2022 and reviewed physical plant equipment and testing protocols. This was also done in Endicott, Johnson City and Vestal. As the only filtration plant in our area, we hosted three inspectors for the course of one week of inspections and direct questions. During this inspection we corrected several typos and transposition errors and gave a completely open and honest explanation of everything we do and have done for many years.

The EPA sets the rules and standards for drinking water quality and relies on The New York State Department of Health to work with individual utilities. Each state conducts inspections and provides interpretation and guidance through the Local Health Department to ensure our compliance with all water quality parameters. We report all water quality testing results and methodology to the State each month, have a flawless record with the Broome County Department of Health and have not had any serious issues or violations in many years.

EPA's detailed review found a number of monitoring and reporting violations from 2021-2022 which have been corrected as described below. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the period(s) noted below, we did not complete all monitoring or testing for the stated contaminants, and therefore cannot be sure of the quality of your drinking water during that time. Subsequent monitoring in 2023 (as noted in the Table of Detected Contaminants) showed no microbiological or MCL violations, and there is no action that you need to take at this time. However, 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.

- During 2021-2022, some coliform samples were taken at locations that were not included in the original sampling plan submitted to NYSDOH. An updated plan was submitted in February 2024. Additionally, in November 2022, we collected 3 fewer coliform samples than required (47 out of 50) due to an operational oversight. Our procedures have been updated to ensure this will not occur again in the future.
- During 2021-2022, we did not correctly report how we determined which sites to sample for lead and copper, did not properly designate new sampling locations to NYSDOH, did not properly document sample locations, holding times, or preservation times, or provide results to the site owner. An updated list of sampling locations was submitted in April 2024 and our procedures have been updated to ensure that sampling documentation and reporting errors will not occur again in the future.*
- The monitoring plan for DBP precursors (TOC), chlorite and chlorine dioxide was not available at the time of the inspection, however, the plan was provided to EPA in February 2024.
- Samples for chlorite (4th quarter of 2021 and the 3rd quarter of 2022) and TOC (May and July 2022) were not reported or taken within the specified sampling period due to issues with our laboratory. For the first instance our lab lost the sample, and for the others the sample bottles were not available until after our designated sampling period. We are working with our lab to ensure adequate bottle supply and improved tracking procedures to prevent loss of future samples.
- During 2021-2022, the City reported the results of the grab sampling for our chlorine residual instead of our continuous monitoring results for the lowest daily residual concentration. Our current reports to NYSDOH reflect the correct format for the lowest daily residual concentration.
- In our 2021 AWQR, we inadvertently omitted information on total coliform/E.coli, chlorine dioxide, and the chlorine residual concentration measured in the distribution system. These are all now contained in this year's AWQR.
- Samples for PFOS and PFOA, which should have been taken during the 2nd quarter of 2022, were instead taken in August 2022 due to issues with our laboratory. The lab was able to provide replacement bottles in August and these samples were below State MCLs and samples taken after that period have all been taken according to plan.
- Finally, were delayed in providing certification to EPA that we corrected significant deficiencies and an action plan for correction of outstanding significant deficiencies, and thus missed the 45-day window required by EPA. The certification and action plan were provided to EPA in November 2023 and the City is making capital improvements to modernize system operations.

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

- Jeffrey Kruger, City of Binghamton, Superintendent Water / Sewer at (607) 772-7210; or
- Peter Haff, Broome County Department of Health (Broome County DOH) at (607) 778-2816

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.

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* 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.

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 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.
- 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 over 7000 service orders both in the field and office level actions. 504 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 8 hydrants, repaired 9 main breaks replaced 7 water services and over 120 feet of new water main including 8 gate valves 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 3950 Feet of new water main ranging from 6" – 12" diameters. 51 new and replaced water service lines. 33 new fire hydrants. 127 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.