WARWICK TOWNSHIP WATER & SEWER AUTHORITY

2024 Annual Water Quality Report

Warwick Township Water & Sewer Authority (WTWSA) is committed to providing our customers with the highest quality of water. We are pleased to provide you with our Annual Water Quality Report for the year 2024, which contains valuable information about your drinking water.

The attached reports are provided by our water suppliers (North Wales Water Authority and Aqua PA) and provide important information related to your water supply. Both Aqua PA and NWWA have multiple sources so all of the information provided in their reports may not be relevant to the Warwick Township Water & Sewer Authority system.

This report summarizes the water quality provided to you by WTWSA. We are pleased to report that our water had no violations and meets or exceeds all federal and state requirements.

Our constant goal is to provide to you a safe, dependable supply of water.

Our water system is designed and operated to deliver water to our customers' plumbing systems that complies with state and federal drinking water standards. This water is disinfected using chlorine, but it is not necessarily sterile. Customer's plumbing, including treatment devices, might remove, introduce or increase contaminants in tap water. All customers should properly operate and maintain internal plumbing systems. You can obtain additional information from the EPA's Safe Drinking Water Hotline at (800) 426-4791.

SOURCE OF WATER – PSWID #1090127

WTWSA water is surface water purchased from Aqua PA through multiple interconnections. In the summer of 2013, WTWSA completed an interconnection with the North Wales Water Authority (NWWA) to supply a cost effective and redundant supply of surface water to Warwick Township.

WTWSA has received many inquiries regarding the recent news articles on the contamination of several local water supplies. The contamination issues effect ground water sources (wells) in these municipalities and most have discontinued use of those sources in favor of the sources that WTWSA have used for years.

WTWSA does <u>not</u> use ground water sources for its water supply. 100% of our water is purchased from Aqua Pennsylvania and the North Wales Water Authority that primarily use surface water that are significantly under the current advisory levels for the perfluorinated compound contamination that other local water supplies have identified and meet the proposed PA DEP and U.S. EPA limits for these parameters.

If you have a private drinking water well and require additional information about the safety of your water you may call the Pennsylvania Department of Environmental Protection at 484-250-5980.

STANDARDS AND TESTING

In order to ensure quality and potability of our treated water, WTWSA, NWWA and Aqua PA monitor for all regulated constituents as required by Federal and State laws, in addition to monitoring for unregulated substances, such as radon and microbial pathogens. WTWSA also participates in sampling and testing for emerging contaminants as directed by the PA DEP.

This report shows the actual water quality monitoring results for the year 2024 and is designed to inform our customers about the excellent water delivered to you over the past year. Although these results represent only the data of the detected substances, your water is tested for many other substances that were not detected and therefore not shown on this report.

QUESTIONS

We want our customers to be informed about their water quality. If you have any questions about your water quality or the information in this report, please contact Dan Ervin, Director of Operations, at 215-343-3584 during normal business hours (Monday-Thursday 8:00 a.m. to 4:00 p.m. and Friday 7:00 a.m. to 3:00 p.m.). To learn more about WTWSA, attend any of our regularly scheduled meetings usually the fourth Monday of the month at 7:00 p.m. in the WTWSA Meeting Room, 1733 Township Greene, Jamison PA. Check our website at www.wtwsa.org for a listing of current meeting dates and times.

THE FUTURE

The WTWSA thanks you for the opportunity of providing your family with quality water. The Authority is proud of the outstanding water and service it provides to its customers by our State licensed water works operators. Executive Director Lauri Halderson wishes to assure you that the Board of Directors has taken the necessary steps to guarantee a safe and plentiful water supply for you, well into the future. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Este informe contiene informacion muy importante sobre su agua de beber. Traduzcalo o hable con alguien que lo entienda bien.

Your drinking water is routinely monitored for constituents according to Federal and State laws. The following table shows detected contaminants tested by WTWSA during 2024. It shows the weighted average as well as minimum and maximum observed levels. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It is important to remember that the presence of these constituents does not necessarily pose a health risk.

WTWSA purchases 100% of your drinking water from Aqua Pennsylvania, Inc. and NWWA. Aqua, NWWA and WTWSA regularly test for more than 80 contaminants that are regulated by the U.S. Environmental Protection Agency (EPA). To monitor and ensure water quality, we collectively test for at least another 80 parameters. WTWSA encourages actions by individuals to protect water quality, including the responsible use of lawn care chemicals and the proper disposal of household hazardous waste, unused pharmaceuticals and health care products.

CHEMICAL CONTAMINANTS TESTED FOR BY WTWSA

WTWSA Treated Water	**Concentration**			**Ideal Goal**	**Federal/State Standard**	
Contaminants	**Average**	**Minimum**	**Maximum**	**MCLG**	**MCL**	**Major Sources in Drinking Water**
Total Coliform Bacteria, % positive samples each month - 2022	0%	0%	0%	0%	5% of monthly samples	Naturally present in the environment

Lead and Copper	**90th Percentile**	**Total # of Samples**	**Samples Exceeding Action Level**	**Ideal Goal**	**Federal/State Standard**	
Compound				**MCLG**	**Action Level**	**Major Sources in Drinking Water**
Copper, ppm, 2022	0.133	35	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead, ppb, 2022	0	35	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

WTWSA Treated Water Disinfectants & Disinfection Byproducts	Concentration			Ideal Goal	Federal/State Standard	
Contaminants	**Average**	**Minimum**	**Maximum**	**MCLG**	**MCL**	**Major Sources in Drinking Water**
Chlorine, mg/L 2022	0.99	0.20	1.9	MRDLG = 4	MRDL = 4	Water additive used to control microbes
Haloacetic acids, ppb, 2022	18.8	10.3	38.0	NA	60	Byproduct of drinking water chlorination
Total Trihalomethanes, ppb 2022	33.3	19.5	55.3	NA	80	Byproduct of drinking water chlorination

NOTES:

Action Level (AL): The concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water system must follow.
Disinfection Byproducts Rule (DBP): Beginning in 2003 under the DBP rule, haloacetic acids were regulated for the first time at 60 ppb, and the standard for total trihalomethanes was lowered to 80 ppb. Compliance with the MCL is based on running annual averages.
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 using the best available treatment technology. Some levels are based on a running annual average.
Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum Residual Disinfectant Level Goal (MRDLG)
The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
ND: Not detected.
NA: Not applicable
ppm: A unit of concentration equal to one part per million.
PWSID: Public water supply identification number.
Unregulated Contaminant Monitoring Rule: During 2004, monitoring was conducted for a series of unregulated compounds. This is a federal program and results were reported to USEPA. None of these compounds were detected.

The following information is mandated by the EPA for inclusion in this report:

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 radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminations that may be present in source water include:
(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
(B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
(D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial process and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
(E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Radon is not regulated in drinking water. It is a radioactive gas that you can't see, taste, or smell. Radon can move up through the ground and into a home. Radon can also get into indoor air when released from tap water. Compared to radon entering a home through soil, radon entering a home through tap water will in most cases be a small source of radon in indoor air.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminations in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be 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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants 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 some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Warwick Township Water & Sewer Authority
1733 Township Greene: P.O. Box 315
Jamison, PA 18929
215-343-3584
wtwsa.org

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Microbiological Contaminants

Contaminant (Unit of Measurement)	Violation Yes/No	Level Detected	Range	MCLG	MCL
Total Coliform Bacteria (Finished Water)	No	0	N/A	0	presence of coliform bacteria in 5% of monthly samples
Fecal Coliform and *E.coli* Bacteria (Finished Water)	No	0	N/A	0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or *E. coli* positive
Turbidity (NTU) (Finished Water)	No	0.03	0.02-0.05	N/A	TT = 1 NTU For a Single Measurement

Data presented in the above table is from calendar year 2024 monitoring performed in accordance with the regulations of the Pennsylvania Department of Environmental Protection. Coliform bacteria, disinfection residual and turbidity are monitored on a continuous basis and reported monthly.

100% of all turbidity samples were below 0.1 NTU. As a member of the Partnership for Safe Drinking Water, our goal is to maintain turbidity levels below 0.1 NTU. This was achieved throughout 2024.

Raw water monitoring for Giardia and Cryptosporidium was performed in April, June, September and December 2024. Giardia was detected in 1 out of 4 samples. Cryptosporidium was detected in 0 out of 4 samples.

Likely Sources of Contamination:

Turbidity: Soil runoff.
Giardia and Cryptosporidium: Naturally present in the environment.

FOREST PARK WATER

Disinfectants and Disinfection By-Products

Contaminant (Unit of Measurement)	Violation Yes/No	Level Detected	Range	MCLG	MCL
Chlorine Residual (mg/L) Entry Points	No	1.69	1.44-1.79	4	4
Bromate (ppb)	No	1.9	0-6.2	0	10

Data presented in the above table is from calendar year 2024 monitoring performed in accordance with the regulations of the Pennsylvania Department of Environmental Protection.
*Maximum Residual Disinfectant Level Goal (MRDLG).
** Maximum Residual Disinfectant Level (MRDL).

Likely Sources of Contamination

Bromate: By-product of drinking water disinfection
Chlorine: Water additive used for disinfection.

FOREST PARK WATER

Inorganic Contaminants

Contaminant (Unit of Measurement)	Violation Yes/No	Level Detected	Range	MCLG	MCL
Barium (ppm)	No	0.016	N/A	2	2
Fluoride (ppm)	No	0.109	N/A	2	2
Nitrate (as Nitrogen) (ppm)	No	0.461	0.282-0.726	10	10
Antimony (ppb)	No	0	N/A	6	6
Arsenic (ppb)	No	0	N/A	N/A	10
Asbestos (MFL) Million Fibers per Liter (12/2021)	No	0	N/A	7	7
Beryllium (ppb)	No	0	N/A	4	4
Cadmium (ppb)	No	0	N/A	5	5
Chromium (ppb)	No	0	N/A	100	100
Cyanide (ppb)	No	0	N/A	200	200
Mercury (inorganic) (ppb)	No	0	N/A	2	2
Nickel (ppb)	No	0	N/A	N/A	N/A
Nitrite (as Nitrogen) (ppm)	No	0	N/A	1	1
Selenium (ppb)	No	0	N/A	50	50
Thallium (ppb)	No	0	N/A	0.5	2

Unless otherwise noted, data presented in the above table is from calendar year 2024 monitoring performed in accordance with the regulations of the Pennsylvania Department of Environmental Protection.

Likely Source of Contamination

Barium: Discharge of drilling wastes, discharge from metal foundries, erosion of natural deposits.
Fluoride: Erosion of natural deposits; Discharge from fertilizer and aluminum factories.
Nitrate (as Nitrogen): Runoff from fertilizer use; leaking septic tanks; erosion of natural deposits.

FOREST PARK WATER

Polyfluoroalkyl Substances (PFAS)

Contaminant (Unit of Measurement)	Highest RAA	Average of all Results	Range	MCLG	MCL
Perfluorooctanoic Acid (PFOA) ppt (ng/L)	2.7	2.1	0-2.9	8	14

Data presented in these tables are from 2024 monthly finished water monitoring at FPW.

Note: Compliance is based on Running Annual Average (RAA).
Minium Reporting Limit (MRL) for Pennsylvania DEP is 5 ng/L.
All results are less than the MRL for state reporting.

Polyfluoroalkyl Substances (PFAS)
PA-DEP Compliance Monitoring – All results below reporting limits. (Non-Detect)

Perfluorooctanesulfonic acid (PFOS)

Hexafluoropropylene oxide dimer acid (HFPDA)(GenX)

Perfluorobutanesulfonic acid (PFBS)

Perfluorohexanesulfonic acid (PFHxS)

Perfluorononanoic acid (PFNA)

Perfluoroheptanoic acid (PFHpA)

***Sources of Contamination:** Synthetic chemical and does not occur naturally in the environment. Used in a wide range of consumer products and industrial applications including: non-stick cookware, water-repellent clothing, stain-resistant fabrics and carpets, cosmetics, firefighting foams, electroplating, and products that resist grease, water, and oil.

"Sources of contamination language was taken from UCMR 5 EPA Overview Fact Sheet and PA DEPs Tier 2 PN PFOS/PFOA Template - currently DEP does not have any language posted in the current CCR guidance document of 1/2025

Synthetic Organic Contaminants including Pesticides & Herbicides

Contaminant (Unit of Measurement)	Violation Yes/No	Level Detected	Range	MCLG	MCL
1,2-Dibromo-3-chloropropane (ppb)	No	0	N/A	0	2
2,4-D (ppb)	No	0	N/A	70	70
2,4,5-TP (Silvex) (ppb)	No	0	N/A	50	50
Alachlor (ppb)	No	0	N/A	0	2
Atrazine (ppb)	No	0	N/A	3	3
Benzo(a)pyrene (PAH) (nanograms/L)	No	0	N/A	0	200
Carbofuran (ppb)	No	0	N/A	40	40
Chlordane (ppb)	No	0	N/A	0	2
Dalapon (ppb)	No	0	N/A	200	200
Dicamba (ppb)	No	0	N/A	N/A	N/A
Di(2-ethylhexyl) adipate (ppb)	No	0	N/A	400	400
Di(2-Ethylhexyl) phthalate (ppb)	No	0	N/A	0	6
Dinoseb (ppb)	No	0	N/A	7	7
Dioxin [2,3,7,8-TCDD] (ppb)	No	0	N/A	0	0.03
Diquat (ppb)	No	0	N/A	2	2
Endothall (ppb)	No	0	N/A	100	100
Endrin (ppb)	No	0	N/A	2	2
Ethylene Dibromide (ppb)	No	0	N/A	0	0.5
Glyphosphate (ppb)	No	0	N/A	70	70
Heptachlor (nanograms/L)	No	0	N/A	0	400
Heptachlor epoxide (nanograms/L)	No	0	N/A	0	200
Hexachlorobenzene (ppb)	No	0	N/A	0	1
Hexachlorocyclo-pentadiene (ppb)	No	0	N/A	50	50
Lindane (nanograms/L)	No	0	N/A	200	200
Methoxychlor (ppb)	No	0	N/A	40	40

FOREST PARK WATER

Synthetic Organic Contaminants including Pesticides & Herbicides (Continued)

Contaminant (Unit of Measurement)	Violation Yes/No	Level Detected	Range	MCLG	MCL
Oxamyl [Vidate] (ppb)	No	0	N/A	200	200
Pentachlorophenol (ppb)	No	0	N/A	0	1
Picloram (ppb)	No	0	N/A	500	500
Polychlorinated Biphenyls (PCBs) (ppb)	No	0	N/A	0	0.5
Simazine (ppb)	No	0	N/A	4	4
Toxaphene (ppb)	No	0	N/A	0	3

Data presented in the above table is from calendar year 2024 monitoring performed in accordance with the regulations of the Pennsylvania Department of Environmental Protection.

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Unregulated Contaminants Monitoring Rule (UCMR5)

UCMR5 - Sampling results listed below are from April 2024 to January 2025.
All results were below the reporting limits (Non-Detect).

11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11C1-PF3OUdS)
1H.1 H, 2H, 2H-perfluorodecane sulfonic acid (8:2FTS)
1H.1 H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)
1H.1 H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)
4,8-dioxa-3H-perfluorononanoic acid (ADONA)
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9C1-PF3ONS)
hexafluoropropylene oxide dimer acid (HFPO-DA)(GenX)
nonafluoro-3.6-dioxaheptanoic acid (NFDHA)
perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)
perfluoro-3-methoxypropanoic acid (PFMPA)
perfluoro-4-methoxybutanoic acid (PFMBA)
perfluorobutanesulfonic acid (PFBS)
perfluorobutanoic acid (PFBA)
perfluorodecanoic acid (PFDA)
perfluorododecanoic acid (PFDoA)
perfluoroheptanesulfonic acid (PFHpS)
perfluoroheptanoic acid (PFHpA)
perfluorohexanesulfonic acid (PFHxS)
perfluorohexanoic acid (PFHxA)
perfluorononanoic acid (PFNA)
perfluorooctanesulfonic acid (PFOS)
perfluorooctanoic acid (PFOA)
perfluoropentanesulfonic acid (PFPeS)
perfluoropentanoic acid (PFPeA)
perfluoroundecanoic acid (PFUnA)
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)
perfluorotetradecanoic acid (PFTA)
perfluorotridecanoic acid (PFTrDA)
Lithium

FOREST PARK WATER

Volatile Organic Contaminants

Contaminant (Unit of Measurement)	Violation Yes/No	Level Detected	Range	MCLG	MCL
Benzene (ppb)	No	0	N/A	0	5
Carbon tetrachloride (ppb)	No	0	N/A	0	5
Chlorobenzene (ppb)	No	0	N/A	100	100
o-Dichlorobenzene (ppb)	No	0	N/A	600	600
p-Dichlorobenzene (ppb)	No	0	N/A	75	75
1,2 – Dichloroethane (ppb)	No	0	N/A	0	5
1,1 – Dichloroethylene (ppb)	No	0	N/A	7	7
cis-1,2-Dichloroethylene (ppb)	No	0	N/A	70	70
trans 1,2-Dichloroethylene (ppb)	No	0	N/A	100	100
Dichloromethane (ppb)	No	0	N/A	0	5
1,2-Dichloropropane (ppb)	No	0	N/A	0	5
1,2-Dichlorobenzene (ppb)	No	0	N/A	600	600
1,4-Dichlorobenzene (ppb)	No	0	N/A	75	75
Ethylbenzene (ppb)	No	0	N/A	700	700
Methyl tertiary butyl ether (MTBE**) (ppb)	**	0	**	**	**
Methyl Chloride (ppb)	No	0	N/A	0	5
Styrene (ppb)	No	0	N/A	100	100
Tetrachloroethylene (ppb)	No	0	N/A	0	5
1,2,4-Trichlorobenzene (ppb)	No	0	N/A	70	70
1,1,1 – Trichloroethane (ppb)	No	0	N/A	200	200
1,1,2 –Trichloroethane (ppb)	No	0	N/A	3	5
Trichloroethylene (ppb)	No	0	N/A	0	5
Toluene (ppm)	No	0	N/A	1	1
Vinyl Chloride (ppb)	No	0	N/A	0	2
Total Xylenes (ppm)	No	0	N/A	10	10

Data presented in the above table is from calendar year 2024 monitoring performed in accordance with the regulations of the Pennsylvania Department of Environmental Protection.

** MTBE is a non-regulated contaminant that is monitored routinely at Forest Park and the North Wales Water Authority.

AQUA℠

An Essential Utilities Company

2024 Water Quality Report*
Main System, PWSID#: PA1460073

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

About Your Drinking Water- Aqua Pennsylvania, Inc. is pleased to provide you with important information about your drinking water in this 2024 Water Quality Report for the Main System (public water supply ID PA1460073). The report summarizes the quality of water Aqua provided in 2024 including details about water sources, what the water at your tap contains, and how it compares to standards set by regulatory agencies. Although the report lists only those regulated substances that were detected in your water, we test for more than what is reported. This report is only a summary of our testing during 2024. If you have any questions about the information in this report, please call 877.987.2782 between the hours of 8:30 AM to 4:30 PM Monday to Friday or visit our website at AquaWater.com.

Sources of Supply – Your drinking water comes from eight surface water sources and several groundwater sites (wells). Source water assessments were completed for the Chester, Ridley, Crum, Pickering, Perkiomen, and Neshaminy Creeks, the Schuylkill River, and groundwater wells in the Main System. The sources, overall, have a moderate risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment Summary Report's eLibrary web page: Source Water Assessment Folder. Complete reports were distributed to municipalities, water suppliers, local planning agencies, and DEP offices. Copies of the complete reports are available for review at the DEP Southeast Regional Office, Records Management Unit, 484.250.5900.

Sources of drinking water (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 radioactive material and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources, such as agriculture, stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. Radon is not regulated in drinking water. It is a radioactive gas that you cannot see, taste, or smell. Most radon enters homes directly from underground - not from the water supply. Radon can dissolve in water and can be released into air from tap water, but this is generally a small source of radon in indoor air.

To ensure that tap water is safe to drink, the Environmental Protection Agency prescribes regulations that limit the amounts of certain contaminants in water provided by public water systems. U.S. Food & Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be 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 U.S. Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 800.426.4791.

Our water systems are designed and operated to deliver water to our customers' plumbing systems that complies with state and federal drinking water standards. This water is disinfected using chloramines, but it is not necessarily sterile. Customers' plumbing, including treatment devices, might remove, introduce, or increase contaminants in tap water. All customers and, in particular, operators of facilities like hotels and institutions serving susceptible populations (like hospitals and nursing homes), should properly operate and maintain the plumbing systems in these facilities. You can obtain additional information from the EPA's Safe Drinking Water Hotline at 800.426.4791.

The following table lists contaminants that were detected during 2024 in your water system. The table provides the average for the sources used to supply the Main System, as well as minimum and maximum observed levels of regulated contaminants.

Aqua Pennsylvania, Inc., Main Division, PWSID # PA1460073

Contaminants	Average Detection	Range of Detections	MCL	MCLG	Sample Date	Violation Y/N	Major Sources in Drinking Water
Turbidity, % meeting	100%	99.9% - 100%	TT	NA	2024	N	Soil runoff
Values above are % meeting plant performance level. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The Treatment Technique (TT) requirement is 95% of samples must be less than or equal to 0.3 NTU.							
Inorganic Contaminants							
Arsenic, ppb	1.2	1.2	10	0	2024	N	Erosion of natural deposits
Barium, ppm	0.07	0.004 – 0.3	2	2	2024	N	
Chromium, ppb	1.4	0.9 – 2.9	100	100	2024	N	
Fluoride, ppm	0.25	0.12 – 0.38	2	2	2024	N	Erosion of natural deposits; water additive to promote strong teeth
Nitrate, ppm	2.9	ND – 4.8 (a)	10	10	2024	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Radiological Contaminants							
Radium-226, pCi/L	0.46	ND – 1.37	5	0	2024	N	Erosion of natural deposits
Gross beta particles, pCi/L	20.1	20.1	50 (b)	0	2023	N	
Uranium, ppb	2.4	2.4	30	0	2023	N	
Volatile Organic Contaminants							
Tetrachloroethylene, ppb	1.6	0.5 – 2.7	5	0	2024	N	Discharge from factories and dry cleaners
Trichloroethylene, ppb	1.3	1.3	5	0	2024	N	Discharge from metal degreasing sites and other factories
Unregulated Volatile Organic Contaminants							
1,2,3-Trichloropropane, ppb (c)	0.025	ND – 0.0027	NA	NA	2024	N	Used as a solvent and to produce other chemicals; found in pesticides
Per- and Polyfluoroalkyl Substances (PFAS)							
Contaminants	**Max Detect**	**Range of Detections**	**MCL**	**MCLG**	**Sample Date**	**Violation (Y/N)**	**Major Sources in Drinking Water**
PFOA (ng/L)	12	ND – 12	14	8	2024	N	Manmade chemical used in products to make them stain, grease, heat, and water resistant.
PFOS (ng/L)	9.8	ND – 9.8	18	14	2024	N	Used for its emulsifier and surfactant properties in or as fluoropolymer (such as Teflon), Fire-Fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives, and photographic films.

(a) Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

(b) EPA considers 50 pCi/L to be the level of concern for beta particles.

(c) Samples were collected from one location (entry point 112) in the Main system.

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Disinfection Byproducts - For haloacetic acids and total trihalomethanes, compliance is based on a locational running annual average (LRAA) of quarterly test results, not a single sample result. Values below reflect monitoring in the distribution system.

Contaminants	Average Detection	Range of Detections	MCL	MCLG	Sample Date	Violation Y/N	Major Sources in Drinking Water
Chlorite, ppm	0.13	ND – 0.44	1	0.8	2024	N	Water additive to control microbes
Haloacetic acids, ppb	21	ND – 39	60	NA	2024	N	Byproduct of drinking water disinfection
Total Trihalomethanes, ppb	32	0.6 – 62	80	NA	2024	N	

Disinfectant Residual - Values below reflect results from routine monthly distribution sampling at multiple sites. Disinfection is accomplished using chloramination and residual disinfectant is measured as total chlorine.

Contaminants	Highest Monthly Average	Lowest Average Result	MRDL	MRDLG	Sample Date	Violation Y/N	Major Sources in Drinking Water
Total Chlorine, ppm	1.22	0.96	4.0	4.0	2024	N	Water additive used to control microbes

Entry Point Disinfectant Residual

Contaminants	Entry Point #	Minimum Residual Level Required	Lowest Level Detected	Range of Detections	Sample Date	Violation Y/N	Major Sources in Drinking Water
Total Chlorine, ppm	112, 115, 116, 117, 136, 138	0.2	0.81	0.81 – 3.18	2024	N	Water additive used to control microbes
Free Chlorine, ppm	103, 107, 111, 123, 125, 132, 137	0.4	0.01 (d)	0.01 – 2.96	2024	N	
	114	0.45	0.01 (d)	0.01 – 2.53	2024	N	
	126	0.51	0.6	0.6 – 2.9	2024	N	
	135	0.54	0.03 (d)	0.03 – 2.56	2024	N	
	105, 110	0.7	0.01	0.01 – 3.01	2024	Y(g)	
	106	0.8	0.01 (d)	0.02 – 2.32	2024	N	
Chlorine Dioxide, ppm	116, 117,138	NA (e)	0	0 – 0.25	2024	N	
Chlorite, ppm	116	NA (f)	0.11	0.11 – 0.76	2024	N	
	117	NA (f)	0.08	0.08 – 0.67	2024	N	
	138	NA (f)	0.29	0.29 – 0.56	2024	N	

(d) Disinfectant levels did not drop below the required minimum residual level for more than 4 hours.
(e) Chlorine Dioxide is used to supplement disinfection.
(f) Chlorite does not have a minimum disinfectant residual; however, the maximum limit is 1.0 mg/L.
(g) See description in violations section below.

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Total Organic Carbon (TOC) during 2024 - For Total Organic Carbon removal, compliance is based on a running annual average of monthly results, not a single result.

Contaminant	Plant ID	Range of % Removal Required	Range of % Removal Achieved	Number of Quarters Out of Compliance	Sample Date	Violation (h) Y/N	Sources of Contamination
TOC	313	25 - 35	- 86 – 54	0	2024	N	Naturally present in the environment
	314	25 - 45	17 – 72	0	2024	N	
	315	25 - 45	23 – 74	0	2024	N	
	335	25 - 45	28 – 100	0	2024	N	
	339	25 - 35	39 – 63	0	2024	N	

(h) Compliance is determined by a running annual average, computed quarterly.

Tap water samples were collected from homes in the service area for lead and copper testing.

Lead and Copper	Action Level	MCLG	90th Percentile	Range of Sampling Results	Samples Exceeding Action Level	Sample Date	Violation Y/N	Major Sources in Drinking Water
Copper, ppm	1.3	1.3	0.197	ND – 0.9	0 out of 53	2022	N	Corrosion of household plumbing
Lead, ppb	15	0	3.4	ND – 9	0 out of 53	2022	N	

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Aqua is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water.

If you are concerned about lead in your water and wish to have your water tested, contact Aqua at 877-987-2782. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead.

A service line inventory has been prepared for this system and shows the composition of your service line. The inventory may be viewed at www.aquawater.com/leadmap.

Aqua conducted unregulated contaminant monitoring as required by the USEPA during 2024. Contaminants in USEPA's current unregulated contaminant monitoring list include 29 per- and polyfluoroalkyl substances (PFAS) and lithium. Below is a table of the results for contaminants that were detected. All other contaminants tested were not detected.

Unregulated Contaminants Detected During 2024		
Unregulated Contaminant	**Average Detection**	**Range of Detections**
Entry Point (treated)		
Perfluorobutanoic acid (PFBA), ng/L	6.9	5.4 – 10
Perfluorobutanesulfonic acid (PFBS), ng/L	4.8	3.0 – 9.5
Perfluoroheptanoic acid (PFHpA), ng/L	4.2	3.1 – 6.9
Perfluorohexanoic acid (PFHxA), ng/L	6.7	3.0 – 17
Perfluorohexanesulfonic acid (PFHxS), ng/L	4.5	3.0 – 7.7
Perfluorononanoic acid (PFNA), ng/L	7.6	5.2 – 12
Perfluorooctanoic acid (PFOA), ng/L	7.0	4.0 – 13
Perfluorooctanesulfonic acid (PFOS), ng/L	5.9	4.1 – 9.2
Perfluoropentanoic acid (PFPeA), ng/L	7.6	3.0 – 22
Total Lithium, ug/L	16	15 – 16

Violations:

In January 2025, we received violations for reporting triennial and annual inorganic contaminant results to DEP after the required deadline. There are no health effects associated with these violations.

In December 2024, we issued a Public Notice to customers for failure to respond to a disinfection treatment breakdown. On 11/7/2024, 11/10/2024, and 11/11/2024, there was an issue that interfered with the accuracy of the continuous chlorine analyzer at one of our many drinking water sources supplying the system. There were chlorine residual concentration readings that were not detected or less than the minimum required. During these occurrences, Aqua was able to confirm that the chlorine disinfection system was functioning properly. The chlorine analyzer at the treatment facility was replaced.

During the 2nd quarter of 2024, we reported results for PFAS to DEP after the required deadline. There are no health effects associated with these violations.

Notes:

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Fluoride: Fluoride might help prevent tooth decay for children but can be harmful in excess. Customers in the Main System receive water mostly from unfluoridated supplies, but some areas receive fluoridated water. Operational testing in the distribution system indicates that some customers in the Main System receive water with fluoride up to 0.7 ppm. For more information about fluoride in your tap water, call Aqua at 877.987.2782 or visit our website at AquaWater.com. This information might be helpful to you, your pediatrician, or your dentist in determining whether fluoride supplements or treatment are appropriate.

Level 1 Assessment: A Level 1 assessment is a study of the waterworks to identify potential problems and determine, if possible, why total coliform bacteria have been found in our waterworks.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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

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 using the best available treatment technology. Some levels are based on a running annual average.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Minimum Residual Disinfectant Level (MinRDL): The minimum level of residual disinfectant required at the entry point to the distribution system.

NA: Not applicable.

ND: Not detected.

Nitrate: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

Mrem/year: millirems per year (a measure of radiation absorbed by the body)

pCi/L: picocuries per liter (a measure of radioactivity)

ppb: parts per billion, or micrograms per liter (µg/L)

ppm: parts per million, or milligrams per liter (mg/L)

ppq: parts per quadrillion, or picograms per liter

ppt: parts per trillion, or nanograms per liter (ng/L)

PWSID: Public water supply identification number.

*This notice contains required or recommended regulatory language, and nothing herein is, is intended as, nor should be construed as, a promise of or contract for payment or reimbursement of expenses incurred for any action you take on account of this notice.