2024 Water Quality Report*
Uwchlan Division, PWSID# PA1150035

Este informe contiene información importante acerca de su agua potable.
Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

About Your Drinking Water

Aqua Pennsylvania, Inc. (Aqua) is pleased to provide you with important information about your drinking water in this 2024 Water Quality Report for the Uwchlan Division (public water supply ID- PA1150035). The report summarizes the quality of water Aqua Pennsylvania 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 or visit our website at AquaWater.com.

Sources of Supply

Your drinking water comes from ground and surface water sources; there are ten wells at six well stations. The Uwchlan Division is integrated with Aqua Pennsylvania's Main Division (PWSID# PA1460073), and some customers may receive a blended supply from the Main Division that comes from other wells, the Pickering and Perkiomen creeks and the Schuylkill River. The Main Division's water quality report is available from Aqua Pennsylvania on our web site listed above or a copy can be requested by calling the phone number above. Source Water Assessments by the Pennsylvania Department of Environmental Protection (DEP) were completed for the Uwchlan Division wells, Pickering and Perkiomen creeks and the Schuylkill River. The sources overall have a moderate risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment Summary Reports 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 report are available for review at the DEP Southeast Regional Office, Records Management Unit, 484.250.5900.

The 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, 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. Radon can also be released into air from tap water. Generally, tap water is 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 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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 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 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).

The following table lists contaminants that were detected during 2024 (unless otherwise noted) in your water system. The state allows monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data below, though representative, are more than one year old.

Aqua Pennsylvania, Inc., Uwchlan Division, PWSID# PA1150035

Contaminants	Average Detection	Range of Detections	MCL	MCLG	Sample Date	Violation Y/N	Major Sources in Drinking Water
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.							
Barium, ppm	0.04	0.02 – 0.08	2	2	2024	N	Erosion of natural deposits
Chromium, ppb	1.1	1.1 – 1.2	100	100	2024	N	
Nitrate, ppm	3.3	2.2 – 4.8 (a)	10	10	2024	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Radiological Contaminants							
Alpha emitters, pCi/L	3.7	3.7	15	0	2023	N	Decay of natural and man-made deposits
Beta/photon emitters, pCi/L	5.8	5.8	50 (b)	0	2023	N	
Disinfection Byproducts: Compliance for Haloacetic Acids and Total Trihalomethanes is based on a running annual average of quarterly samples, not a single sample result. The range shows the highest and lowest result for individual samples.							
Haloacetic acids, ppb	19	3.4 – 38	60	NA	2024	N	Byproducts of drinking water chlorination
Total Trihalomethanes, ppb	30	4.6 – 52	80	NA	2024	N	
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)	32	ND-32	14	8	2024	N	Manmade chemical used in products to make them stain, grease, heat, and water resistant.
PFOS (ng/L)	7.2	ND-7.2	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.

Contaminants	Highest Monthly Average	Lowest Average Result	MRDL	MRDLG	Sample Date	Violation Y/N	Major Sources in Drinking Water
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.							
Total chlorine, ppm	1.1	0.88	4	4	2024	N	Water additive used to control microbes

Contaminants	Entry Point #	Minimum Residual Level Required	Lowest Level Detected	Range of Detections	Sample Date	Violation Y/N	Major Sources in Drinking Water
Entry Point Disinfectant Residual – *PA Ground Water Rule*: This rule requires that no well station operate below specific minimum free chlorine levels for more than 4 hours.							
Free Chlorine, ppm	100	0.7	0.08 (c)	0.08 – 3.14	2024	N	Water additive used to control microbes
	101	0.4	0.44	0.44 – 3.00	2024	N	
	102	0.51	0.24 (c)	0.24 – 2.81	2024	N	
	103	0.4	0.27 (c)	0.27 – 2.53	2024	N	
	104	0.4	0.01 (c)	0.01 – 3.13	2024	N	
	105	0.54	0.14 (c)	0.14 – 2.94	2024	N	

(c) Disinfectant levels did not drop below minimum required level for more than 4 hours.

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	0.46	ND – 0.63	0 out of 40	2024	N	Corrosion of household plumbing
Lead, ppb	15	0	2	ND – 6.2	0 out of 40	2024	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	5.7	5.7
Perfluorobutanesulfonic acid (PFBS), ng/L	4.2	3.0 – 5.1
Perfluorohexanoic acid (PFHxA), ng/L	5.2	3.2 – 6.7
Perfluorooctanoic acid (PFOA), ng/L	6.6	5.3 – 9.3
Perfluorooctanesulfonic acid (PFOS), ng/L	5.4	4.4 – 7.1
Perfluoropentanoic acid (PFPeA), ng/L	5.5	3.1 – 7.7

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.

Aqua Pennsylvania, Inc., Main Division, PWSID # PA1460073 (cont'd)

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	
	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.

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 (g) 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	

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

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

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.

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.