2024 ANNUAL DRINKING WATER QUALITY REPORT NEWTOWN ARTESIAN WATER COMPANY, PWSID 1090043

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda. (This report contains important information about your drinking water. Translate it or speak with someone who understands it.)

Introduction

The Newtown Artesian Water Company (NAWC) is pleased to present our 2024 Drinking Water Quality Report. We are committed to providing a safe and dependable supply of good quality drinking water to our valued customers in the Newtown area. We are happy to inform you that your drinking water is in full compliance with current water quality standards established by the United States Environmental Protection Agency (EPA) under the Safe Drinking Water Act (SDWA). Our dedicated staff takes pride in providing high quality drinking water and superior customer service, at a reasonable price. If you have any questions about this report or concerning your water quality, please contact the NAWC office at 215-968-6781.

Violations

NAWC had two reporting violations in July 2024 for failure to report disinfection byproducts Haloacetic Acids and Trihalomethanes. The violation was a reporting violation by the laboratory that conducted the testing. Duplicate results were entered by the lab which caused other results not to be entered. This reporting error was corrected in the Drinking Water Electronic Lab Reporting (DWELR) system. All reporting violations were addressed and corrected. There were no potential health or safety concerns due to these violations.

NAWC Water System

The NAWC water system is supplied by five (5) groundwater sources (primary Wells 4A, 5, and 6; reserve Wells 14 and 18), and through interconnections with the Bucks County Water and Sewer Authority (BCWSA) and the Pennsylvania American Water Company (PAWC). The groundwater supplies are located in the NAWC service area.

The water purchased from BCWSA is a combination of water supplied by North Wales Water Authority (NWWA) and Lower Bucks County Joint Municipal Authority (LBCJMA). NWWA supplies surface water from the Delaware River/North Branch Neshaminy Creek that has been treated at the Forest Park Water Treatment Plant (WTP). LBCJMA supplies a combination of surface water from the Delaware River that is treated at their water treatment plant and groundwater from five (5) wells.

The water purchased from PAWC is a surface water supply also originating from the Delaware River and treated at PAWC's Yardley WTP and groundwater from four (4) wells.

At the end of 2024, we provided service to 10,697 customers in Newtown Borough, Newtown Township and a portion of Middletown Township north and west of Core Creek.

Our 2024 average system demand equaled 2.115 million gallons per day. The well supplies provided 34.62 percent of the total supply. Our well water receives disinfection treatment using sodium hypochlorite and corrosion control treatment using polyphosphate. The purchased water from BCWSA and PAWC receives complete treatment, including filtration, at the Forest Park WTP/LBCJMA WTP and Yardley WTP, respectively. Purchased water provided approximately 65 percent of the total supply in 2024 (BCWSA – 85 percent, PAWC – 15 percent). Additional treatment provided to the BCWSA and PAWC supplies by NAWC includes: the addition of sodium hypochlorite to generate/maintain a free chlorine residual within the distribution system. The purchased water from BCWSA is also treated with polyphosphate.

Source Water Assessment

A *Source Water Assessment* of our groundwater supply sources was completed by DEP in 2016. The Assessment has found that we are potentially most susceptible to contamination from transportation corridors. Potential pollutants used in residential and commercial areas also pose a threat to our wells. A summary report of the Assessment is available, and interested customers may contact Newtown Artesian Water Company at 215-968-6781 to discuss their Source Water Protection Program and obtain a copy of the report upon request.

Water Quality

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 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 water 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, urban stormwater runoff and residential uses.
- *Organic Chemical Contaminants*, including synthetic and volatile organics, which are by-products 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.

To ensure that tap water is safe to drink, EPA and DEP prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food & Drug Administration (FDA) and DEP regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

In addition to monitoring certain contaminants governed by the EPA, there are other contaminants that are not regulated. These unregulated contaminants are monitored to help EPA determine where those contaminants occur and whether those contaminants should be regulated in the future.

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at (800) 426-4791 or by visiting the EPA's drinking water website www.epa.gov/safewater. NAWC works with local and state agencies to address water quality issues and protect its sources from contamination.

Monitoring Your Water

We routinely monitor for contaminants in your drinking water according to federal and state laws. The tables on the following pages show the results of monitoring for the period of January 1 to December 31, 2024. DEP allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data is from prior years in accordance with the SDWA. The dates have been noted on the sampling results table.

On the following pages there are three (3) different sets of water quality tables:

- On pages 4 and 5 you will find Detected Contaminants for the water supplied by the NAWC groundwater wells and the water within the NAWC distribution system.
- On pages 6 through 7 you will find Detected Contaminants tables representative of water purchased from BCWSA.
- On pages 8 through 12 you will find Detected Contaminants tables representative of water purchased from the PAWC's Yardley System.

As is shown in the following Detected Contaminants tables, our water system had no water quality violations in 2024.

Definitions

The following definitions will help you understand the key terms and abbreviations contained in the following Detected Contaminants table:

- *Action Level (AL)* – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- *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.
- *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 the 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 health risk. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.
- *Minimum Residual Disinfectant Level (MinRDL)* – The minimum level of residual disinfectant required at the entry point to the distribution system.
- *Not Applicable (N/A)* – Does not apply.
- *Nephelometric Turbidity Unit (NTU)* – Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- *Non-Detects (ND)* – Laboratory analysis indicates that the constituent is not present.
- *Parts Per Million (ppm) or Milligrams per Liter (mg/L)* – One part per million corresponds to one minute in two years or a single penny in $10,000 (1 ppm = 1,000 ppb).
- *Parts Per Billion (ppb) or Micrograms Per Liter (㎍/L)* – One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000 (1,000 ppb = 1 ppm).
- *Pico Curies Per Liter (pCi/L)* – A measure of radioactivity.
- *Treatment Technique (TT)* – A required process intended to reduce the level of a contaminant in drinking water.

Detected Contaminants
Newtown Artesian Water Company (NAWC) – Well Supplies

Microbial Contaminants	MCL	MCLG	Highest Result or % of Positive Samples	Range of Detections	Violation	Sources of Contamination
Total Coliform Bacteria	1 positive monthly sample	0 positive monthly samples	0 positive monthly sample	ND	No	Naturally present in the environment

Inorganic Chemicals (IOCs)	Highest Result	Range of Detections	MCL in CCR units	MCLG	Violation	Sources of Contamination
Nitrate (ppm)	3.53	3.27 – 3.53	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Entry Point Disinfectant Residual – Chlorine [1]	Lowest Result	Range of Detections	MinRDL	MRDLG	Violation	Sources of Contamination
Wells 4&5 (ppm)	0.86	0.86 – 1.81	0.75	N/A	No	Water additive used to control microbes.
Well 6 (ppm)	0.98	0.98 – 1.72	0.40	N/A	No	
Wells 14&18 (ppm) [6]	N/A	N/A	0.50	N/A	No	
Lead and Copper	**90th Percentile**	**No. of Sites above AL**	**Action Level**	**MCLG**	**Violation**	**Sources of Contamination**
Lead (ppb) (2022)	ND	0	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper (ppm) (2022)	0.188	0	1.3	1.3	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.

Disinfectants / Disinfection Byproducts (NAWC)	Highest Result	Range of Detections	MCL or MRDL	MCLG or MRDLG	Violation	Sources of Contamination
Distribution Chlorine Residual (ppm)	1.32 [2]	0.21 – 3.8 [4]	4	4	No	Water additive used to control microbes.
Haloacetic Acids (ppb)	24.65 [3]	9.9 – 50.2 [4]	60	N/A	No	Byproduct of drinking water disinfection.
Total Trihalomethanes (ppb)	33.1 [3]	11.4 – 55.3 [4]	80	N/A	No	Byproduct of drinking water disinfection.

Radionuclides	Highest Result	Range of Detections	MCL	MCLG	Violation	Sources of Contamination
Alpha Emitters (pCi/l) (2020)	6.2	2.3 – 6.2	15	0	No	Erosion of natural deposits.
Combined Uranium (ppb) (2023)	3.886	3.149 – 3.886	30	0	No	Erosion of natural deposits.
Radium – 226 & 228 (ppm) (2023)	1.127	0 – 0.8	5	0	No	Erosion of natural deposits.

Per- and Polyfluoroalkyl Substances (PFAS)	MCL [5]	MCLG	Average Result	Range of Detections	Violation	Sources of Contamination
Perfluorooctanoic Acid (PFOA) (ppt)	14	8	5.96	4.6 – 7	No	See Note [5]
Perfluorooctane Sulfonic Acid (PFOS) (ppt)	18	14	10.7	9.3 - 12	No	See Note [5]

(1) Results presented in the table are for free chlorine from NAWC.
(2) Monthly average values.
(3) Highest Running Annual Average (RAA).
(4) Range represents sampling at individual sample points.
(5) PFAS are man-made chemicals that have been produced and used for decades in connection with non-stick cookware, stain-resistant carpeting and fabrics, food packaging, industrial processes, and in fire-fighting foam. In January 2023, PA DEP published its PFAS MCL Rule, setting MCLs for PFOA and PFOS in drinking water. Initial compliance monitoring began in January 2024.
(6) Not in use during 2024.

2024 CCR Numbers

Results reflect data for the BCWSA Main Lower South System - PWSID# 1090079

Contaminant	BCWSA Results				NWWA Results				LBCJMA Results				BCWSA CCR Reported Number			
	Result	Range		Sample Date	Result	Range		Sample Date	Result	Range		Sample Date	Result	Range		Sample Date
		Low	High			Low	High			Low	High			Low	High	
Disinfectants and Disinfection By-Products																
Chlorine Residual (mg/L)	1.18	0.69	1.18	2024	1.69	1.44	1.79	2024		0.3	4.4	2024	1.18	0.69	1.18	2024
Total Trihalomethanes (ppb)	49.7	11.2	62.3	2024					31.1	10.6	81.8	2024	49.7	11.2	62.3	2024
Haloacetic Acids (ppb)	46.8	8.06	54.1	2024					23.1	17.7	33.5	2024	46.8	8.06	54.1	2024
Bromate (ppb)					1.9	ND	6.2	2024					1.9	ND	6.2	2024
Inorganic Contaminants																
Antimony (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Arsenic (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Asbestos (MFL)	ND	NA	NA	2023	0	NA	NA	2021					ND	NA	NA	2023
Barium (ppm)					0.016	NA	NA	2024	0.015			2024	0.016	0.015	0.016	2024
Beryllium (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Cadmium (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Chromium (ppb)					0	NA	NA	2024	1.8			2024	1.8	ND	1.8	2024
Cyanide (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Fluoride (ppb)					0.109	NA	NA	2024	0.54	0.20	0.70	2024	0.54	0.109	0.7	2024
Mercury, inorganic (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Nickel (ppb)					0	NA	NA	2024	2.7			2024	2.2	ND	2.2	2024
Nitrate as Nitrogen (ppm)					0.461	0.282	0.726	2024					0.461	0.282	0.726	2024
Nitrite as Nitrogen (ppm)					0	NA	NA	2024					ND	NA	NA	2024
Selenium (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Thallium (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Synthetic Organic Contaminants																
1,2-Dibromo-3-chloropropane (ppb)					0	NA	NA	2024					ND	NA	NA	2024
2,4-D (ppb)					0	NA	NA	2024					ND	NA	NA	2024
2,4,5-TP (Silvex) (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Alachlor (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Atrazine (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Benzo(a)pyrene (ng/L)					0	NA	NA	2024					ND	NA	NA	2024
Carbofuran (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Chlordane (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Dalapon (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Dicamba (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Di(2-ethylhexyl)adipate (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Di(2-ethylhexyl)phthalate (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Dinoseb (ppm)					0	NA	NA	2024					ND	NA	NA	2024
Dioxin [2,3,7,8-TCDD] (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Diquat (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Endothall (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Endrin (ppm)					0	NA	NA	2024					ND	NA	NA	2024
Ethylene dibromide (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Glyphosphate (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Heptachlor (ng/L)					0	NA	NA	2024					ND	NA	NA	2024
Heptachlor epoxide (ng/L)					0	NA	NA	2024					ND	NA	NA	2024
Hexachlorobenzene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Hexachlorocyclopentadiene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Lindane (ng/L)					0	NA	NA	2024					ND	NA	NA	2024
Methoxychlor (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Oxamyl [Vidate] (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Pentachlorophenol (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Picloram (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Polychlorinated Biphenyls (PCBs) (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Simazine (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Toxaphene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Volatile Organic Contaminants																
Benzene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Carbon tetrachloride (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Chlorobenzene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
o-Dichlorobenzene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
p-Dichlorobenzene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
1,2-Dichloroethane (ppb)					0	NA	NA	2024					ND	NA	NA	2024
1,1-Dichloroethylene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
cis-1,2-Dichloroethylene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
trans-1,2-Dichloroethylene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Dichloromethane (ppb)					0	NA	NA	2024					ND	NA	NA	2024
1,2-Dichloropropane (ppb)					0	NA	NA	2024					ND	NA	NA	2024
1,2-Dichlorobenzene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
1,4-Dichlorobenzene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Ethylbenzene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Methyltertiarybutylether (MTBE) (ppb)					0			2024					ND			2024
Methyl chloride (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Styrene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Tetrachloroethylene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
1,2,4-Trichlorobenzene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
1,1,1-Trichloroethane (ppb)					0	NA	NA	2024					ND	NA	NA	2024
1,1,2-Trichloroethane (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Trichloroethylene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Toluene (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Vinyl chloride (ppb)					0	NA	NA	2024					ND	NA	NA	2024
Total Xylenes (ppm)					0	NA	NA	2024					ND	NA	NA	2024
Radioactive Contaminants																
Alpha Emitters (pCi/L)					0	0	0	2023	0.250			2020	0.250	ND	0.250	2020 & 2023
Uranium (µg/L)					0	0	0	2023					ND	ND	ND	2023
Combined Radium (pCi/L)					0	0	0	2023	1.175			2024	1.175	ND	1.175	2023 & 2024
Beta/Photon Emitters (pCi/L)									0.310			2020	0.310	ND	0.310	2020

Contaminant	BCWSA			NWWA			LBCJMA			BCWSA CCR Reported Number		
	90th Percent Value	# of Sites Above AL	Sample Date	90th Percent Value	# of Sites Above AL	Sample Date	90th Percent Value	# of Sites Above AL	Sample Date	90th Percent Value	# of Sites Above AL	Sample Date
Lead and Copper												
Copper (ppm)	0.101	0 out of 31	2022	0.242	0 out of 35	2022	0.19		2022	0.101	0 out of 31	2022
Lead (ppb)	ND	0 out of 31	2022	3.0	0 out of 35	2022	ND		2022	ND	0 out of 31	2022

Contaminant	BCWSA				NWWA				LBCJMA				BCWSA CCR Reported Number			
	Result	Range		Sample Date	Result	Range		Sample Date	Result	Range		Sample Date	Result	Range		Sample Date
		Low	High			Low	High			Low	High			Low	High	
Microbiological Contaminants																
Total Coliform Bacteria	1			2024	0	NA	NA	2024					1			2024
Fecal Coliform Bacteria					0	NA	NA	2024								

Contaminant	BCWSA				NWWA				LBCJMA				BCWSA CCR Reported Number			
	Result	Range		Sample Date	Result	Range		Sample Date	Result	Range		Sample Date	Result	Range		Sample Date
		Low	High			Low	High			Low	High			Low	High	
Turbidity																
TT=1NTU for a single measurement					0.03	0.02	0.05	2024	0.06			2024	0.06	0.02	0.06	2024
TT=at least 95% of samples ≤0.3 NTU					100%			2024	100%			2024	100%			2024

Contaminant	BCWSA			NWWA			LBCJMA			BCWSA CCR Reported Number		
	Highest Level Detected	# of Samples Containing Contaminant	Sample Date	Highest Level Detected	# of Samples Containing Contaminant	Sample Date	Highest Level Detected	# of Samples Containing Contaminant	Sample Date	Highest Level Detected	# of Samples Containing Contaminant	Sample Date
Cryptosporidium (oocysts/L)					0 out of 4	2024						
Giardia (oocysts/L)					1 out of 4	2024						

Contaminant	BCWSA				NWWA				LBCJMA				BCWSA CCR Reported Number			
	Result	Range		Sample Date	Result	Range		Sample Date	Result	Range		Sample Date	Result	Range		Sample Date
		Low	High			Low	High			Low	High			Low	High	
Secondaries																
Total Alkalinity (ppm)	54	38	54	2024					45	18	61	2024	54	38	54	2024
Aluminum (ppm)	<0.02	<0.02	<0.02	2024									<0.02	<0.02	<0.02	2024
Chloride (ppm)	59.1	33.8	59.1	2024									59.1	33.8	59.1	2024
Color (Color Units)	5	<5	5	2024									5	<5	5	2024
Corrosivity (Langelier Index)	-0.900	-0.630	-0.900	2024									-0.900	-0.630	-0.900	2024
Foaming Agents (MBAS) (ppm)	<0.05	<0.05	<0.05	2024									<0.05	<0.05	<0.05	2024
Hardness (ppm)	98.3	65.2	98.3	2024									98.3	65.2	98.3	2024
Iron (ppm)	0.04	<0.02	0.04	2024									0.04	<0.02	0.04	2024
Manganese (ppm)	<0.005	<0.005	<0.005	2024									<0.005	<0.005	<0.005	2024
Odor (TON)	3	1	3	2024									3	1	3	2024
pH	7.65	7.35	7.65	2024									7.65	7.35	7.65	2024
Sodium (ppm)	19.5	12.3	19.5	2024									19.5	12.3	19.5	2024
Sulfate (ppm)	13.4	11.5	13.4	2024									13.4	11.5	13.4	2024
Total Dissolved Solids (ppm)	244	107	244	2024									244	107	244	2024
Zinc (ppm)	0.029	<0.005	0.029	2024									0.029	<0.005	0.029	2024

Contaminant	BCWSA				NWWA				LBCJMA				BCWSA CCR Reported Number			
	Result	Range		Sample Date	Result	Range		Sample Date	Result	Range		Sample Date	Result	Range		Sample Date
		Low	High			Low	High			Low	High			Low	High	
Perfluorinated Compounds																
Perfluorooctanoic Acid (PFOA) (ppt)	3.10	2.3	4.0	2024	2.7	ND	2.9	2024	3.18	2.64	3.96	2024	3.10	2.3	4.0	2024
Perfluorooctanesulfonic Acid (PFOS) (ppt)	2.55	ND	2.9	2024	ND	ND	ND	2024	2.16	1.45	2.93	2024	2.55	ND	2.9	2024

Water Quality **Results**

Pennsylvania American Water conducts extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables. While most monitoring was conducted in 2024, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting the tables below, see the "Definition of Terms" on the previous page. Some unregulated substances are measured, but maximum contaminant levels have not been established by the government. These contaminants are shown for your information.

PAW – Pennsylvania American Water Yardley

NOTE: Regulated contaminants not listed in these tables were not found in the treated water supply.

LEAD AND COPPER MONITORING - At least 30 tap water samples are collected at customers' taps every 3-years								
Substance (with units)	**Year Sampled**	**Compliance Achieved**	**MCLG**	**Action Level (AL)**	**90th Percentile**	**No. of Homes Sampled**	**Homes Above Action Level**	**Typical Source**
Lead (ppb)	2022	Yes	0	15	1	30	1	Corrosion of household plumbing systems.
Copper (ppm)	2022	Yes	1.3	1.3	0.14	30	0	Corrosion of household plumbing systems.

REVISED TOTAL COLIFORM RULE - At least 40 samples collected each month in the distribution system						
Substance (with units)	**Year Sampled**	**Compliance Achieved**	**MCLG**	**MCL**	**Highest Percentage Of Positive Samples**	**Typical Source**
Total Coliform [1]	2024	Yes	0	TT = Less than 5% monthly samples are positive	2.5%	Naturally present in the environment.
E. Coli [2]	2024	Yes	0	MCL = No confirmed samples	0	Human and animal fecal waste.

NOTE: Coliforms are bacteria that are naturally present in the environment and are used as an indicator of the general bacteriological quality of the water. We are reporting the highest percentage of positive samples in any month.

1 – The Treatment Technique for Total Coliforms requires that if the number of total coliform positive samples exceeds 2, a system assessment must be conducted, any sanitary defects identified, and corrective actions completed. Additional Level 1 Assessments or Level 2 Assessments are required depending on the circumstances.

2 – The Treatment Technique for E. Coli requires that for any total coliform positive routine sample with one or more total coliform positive check samples and an E. coli positive result for any of the samples a Level 2 Assessment must be conducted, any sanitary defects identified, and corrective actions completed. The E. Coli MCL is exceeded if routine and repeat samples are total coliform-positive and either is E. coli-positive, or the system fails to take repeat samples following an E. coli-positive routine sample, or the system fails to analyze total coliform-positive repeat samples for E. coli..

DISINFECTION BYPRODUCTS - Collected in the Distribution System							
Substance (with units)	**Year Sampled**	**Compliance Achieved**	**MCLG**	**MCL**	**Highest LRAA**	**Range Detected**	**Typical Source**
Total Trihalomethanes (TTHMs) (ppb)	2024	Yes	NA	80	35.1	13.7 – 62.2	By-product of drinking water disinfection.
Haloacetic Acids (HAAs) (ppb)	2024	Yes	NA	60	25.4	2.6 – 28.5	By-product of drinking water disinfection.

NOTE: Compliance is based on the running annual average at each location (LRAA). The Highest LRAA reflects the highest average at any location and the Range Detected reflects all samples from this year used to calculate the running annual averages.

DISINFECTANTS - Collected in the Distribution System and at the Treatment Facilities									
Substance (with units)	**Entry Point**	**Year Sampled**	**Compliance Achieved**	**MRDLG**	**MRDL**	**Minimum Chlorine Residual**	**Compliance Result**	**Range Detected**	**Typical Source**
Entry Point Chlorine Residual (ppm)[1]	Entry Point 101 - Yardley WTP	2024	Yes	4	4	0.20	0.55	0.55 – 3.13	Water additive used to control microbes.
	Entry Point 104 - Highland Drive	2024	Yes	4	4	0.40	0.83	0.83 – 3.08	
	Entry Point 107 - College Avenue	2024	Yes	4	4	0.40	0.49	0.49 – 2.84	
Distribution System Chlorine Residual (ppm)[2]	Yardley Distribution System	2024	Yes	4	4	0.2	2.15	1.32 – 2.15	Water additive used to control microbes.

1 - Data represents the lowest residual entering the distribution system from our water treatment plant.
2 - Data represents the highest monthly average of chlorine residuals measured throughout our distribution system.

TREATMENT BYPRODUCTS PRECURSOR REMOVAL - Collected at the Treatment Plant								
Substance (with units)	**Year Sampled**	**Compliance Achieved**	**MCLG**	**MCL**	**Range of % Removal Required**	**Range of % Removal Achieved**	**Number of Quarters Out of Compliance**	**Typical Source**
Total Organic Carbon (TOC)	2024	Yes	NA	TT	25% to 35%	50.2% to 71.7%	0	Naturally present in the environment.

TURBIDITY - Continuous Monitoring at the Treatment Plant							
Substance (with units)	**Year Sampled**	**Compliance Achieved**	**MCLG**	**MCL**	**Highest Single Measurement and Lowest Monthly % of Samples ≤0.3 NTU**	**Sample Date of Highest and Lowest Compliance Result**	**Typical Source**
Turbidity (NTU)	2024	Yes	0	TT: Single result >1 NTU	0.42	10/09/2024	Soil runoff.
	2024	Yes	NA	TT: At least 95% of samples ≤0.3 NTU	99.97%	October 2024	Soil runoff.

OTHER SUBSTANCES OF INTEREST - Collected at the Treatment Plant			
Substance (with units)	**Year Sampled**	**Average**	**Comments**
pH	2024	7.49	pH is a measure of the acid/base properties of water.
Total Hardness (ppm)	2024	56 (3.27 grains per gallon)	Naturally occurring.
Iron (ppm)[1]	2024	0.01	Corrosion of pipes; leaching of iron salts from soil and rocks, and industrial pollution. Essential dietary trace nutrient.
Manganese (ppm)[1]	2024	0.01	Naturally-occurring elemental metal; largely used in aluminum alloy production. Essential dietary trace nutrient.
Phosphate (as PO_4) (ppm)	2024	1.27	Chemical added to water to reduce corrosion tendencies of water as it travels from the treatment plant to our customer's homes.
Zinc (ppm)	2024	0.87	Naturally-occurring by erosion of minerals from rocks and soil.

1 – Substances with Secondary MCLs do not have MCLGs; these limits are primarily established to address aesthetic concerns.

OTHER REGULATED SUBSTANCES - Collected at the Treatment Facilities								
Substance (with units)	**Entry Point**	**Year Sampled**	**Compliance Achieved**	**MCLG**	**MCL**	**Highest Compliance Result**	**Range Detected**	**Typical Source**
Barium (ppm)	Entry Point 104 – Highland Drive	2024	Yes	2	2	0.4	Single Sample	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
	Entry Point 107 – College Avenue	2024	Yes	2	2	0.1	Single Sample	
Nitrate (ppm)	Entry Point 101, 104, 107	2024	Yes	10	10	3.44	0.79 to 3.44	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.
Sodium[1] (ppm)	Entry Point 101, 104, 107	2024	NA	NA	NA	38.9	24.8 to 38.9	Erosion from naturally occurring deposits. Used in water softener regeneration.
Perfluorooctanoic Acid PFOA (ppt)	Entry Point 101, 104, 107	2024	Yes	8	14	9.1	ND to 9.1	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain firefighting activities.
Perfluorooctanesulfonic Acid PFOS (ppt)	Entry Point 101, 104, 107	2024	Yes	14	18	6.9	ND to 6.9	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain firefighting activities.
Uranium (ug/L)	Entry Point 104 – Highland Drive	2023	Yes	0	30	1.95	Single Sample	Erosion from naturally occurring deposits.
	Entry Point 107 – College Avenue	2023	Yes	0	30	3.77	Single Sample	
Gross Alpha emitters (pCi/L)	Entry Point 104 – Highland Drive	2020	Yes	0	15	3.1	Single Sample	Erosion of natural deposits
	Entry Point 107 – College Avenue	2020	Yes	0	15	4	Single Sample	

1 - For healthy individuals, the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

UNREGULATED CONTAMINANT MONITORING RULE

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is necessary. Every five years, the EPA issues a new list of no more than 30 unregulated contaminants to be monitored. If you are interested in examining the results, please contact Brandy Braun at 724.986.3617. The table below provides information on the unregulated contaminants that were detected in the water system under the current round of monitoring.

UNREGULATED CHEMICALS					
Parameter	**Year Sampled**	**Average Amount Detected**	**Range Low - High**	**U.S. EPA MCL (effective 2029)**	**Typical Source**
Perfluorooctanoic acid (PFOA)	2024	4.8 ppt	ND to 9.9 ppt	4.0 ppt	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain firefighting activities.
Perfluorooctanesulfonic acid (PFOS)	2024	3.2 ppt	ND to 7.0 ppt	4.0 ppt	
Perfluorobutanesulfonic acid (PFBS)	2024	2.2 ppt	ND to 5.0 ppt	N/A	
Hazard Index[1]	2024	0.001	ND to 0.0025	1	
Perfluorobutanoic acid (PFBA)	2024	1.2 ppt	ND to 5.4 ppt	N/A	
Perfluoroheptanoic acid (PFHpA)	2024	0.68 ppt	ND to 3.1 ppt	N/A	
Perfluorohexanoic acid (PFHxA)	2024	2.1 ppt	ND to 4.8 ppt	N/A	
Perfluoropentanoic acid (PFPeA)	2024	2.3 ppt	ND to 5.1 ppt	N/A	

[1]Hazard Index or HI. The Hazard Index is an approach that determines the health concerns associated with mixtures of certain PFAS in finished drinking water. Low levels of multiple PFAS that individually would not likely result in adverse health effects may pose health concerns when combined in a mixture. The Hazard Index MCL represents the maximum level for mixtures of PFHxS, PFNA, HFPO–DA, and/or PFBS allowed in water delivered by a public water system. A Hazard Index greater than 1 requires a system to take action.

For more information on the U.S. EPA's PFAS drinking water standards, including the Hazard Index, please visit https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas

PFAS chemicals are unique, so two PFAS chemicals at the same level typically do not present the same risk. Therefore, you should not compare the results for one PFAS chemical against the results of another.

Additional Information

The monitoring results, presented in the Detected Contaminants tables, indicate that certain constituents including lead, copper and nitrate have been detected. The following paragraphs provide additional educational information on these contaminants.

NAWC met all requirements under the SDWA Lead and Copper Rule based on 2022 sampling. Regulations state that ninety (90) percent of samples taken must be below the Action Levels of 15 ppb for lead and 1.3 ppm for copper. In our water, the 90th percentile level for lead was not detectable, and the 90th percentile level for copper was 0.29 ppm. There were no samples taken that exceeded the Action Level for lead. There were no samples taken that exceeded the Action Level for copper.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily leached from materials and components associated with service lines and home plumbing. NAWC 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 or at http://www.epa.gov/safewater/lead

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.

Radon

NAWC has tested for radon at its groundwater supplies and found elevated levels of this constituent. Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. and occurs naturally in most groundwater. Radon can move up through the ground and into a home through cracks and holes in the foundation and can build up to high levels in all types of homes. Radon can be released from water into the air through showering, bathing, washing dishes, or washing clothes. Radon gas released from tap water is a very small part of the total radon in the air. The inhalation or breathing of radon gas has been linked to lung cancer, although it is unclear how radon in your drinking water contributes to this health effect. If you are concerned about radon in your home, tests are available to determine the total exposure level. For additional information, contact EPA's Radon Hotline at (800) SOS-RADON. EPA does not currently regulate radon in drinking water under the SDWA. However, when an MCL is set for radon, NAWC will take appropriate action to comply with the Radon Rule at their groundwater supplies and comply with Safe Drinking Water Regulations.

Vulnerability

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/Centers for Disease Control (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 at (800) 426-4791 or on-line at www.epa.gov/safewater.

PFAS

PFAS are a group of man-made chemicals used in many consumer products, including food wrappers, fabrics, and carpets, to make them resistant to water, oil, grease, stains, and heat. Certain types of firefighting foam may contain PFAS. On January 14, 2023, PA DEP published the PFAS MCL Rule. This rule set a maximum contaminant level (MCL) for two PFAS: perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), two of the more common and persistent PFAS chemicals. The MCL for PFOA was set at 14 parts per trillion (ppt) and the MCL for PFOS was set at 18 ppt. The required monitoring initial compliance took place in 2024.

Conclusions

The drinking water we provide to our customers meets and is in compliance with Federal and State requirements. Although certain water quality parameters have been detected, the EPA and DEP have determined that the water is safe. NAWC works around the clock to provide high quality water to all our customers. Please contact us if you have any questions about this report or the public water supply service we provide to you.

Contact Information

We trust this report will help you understand the NAWC water system, the regular monitoring performed to ensure your drinking water is safe, the 2024 water quality results, and related information. If you have any questions about the report, or NAWC and the service you receive, please contact us at our office. Please visit our website at www.newtownwater.com for information about NAWC rates and rules, and for direct electronic access of this report visit https://newtownwater.com/documents/2024-NAWC-CCR.pdf.

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