



PWSID No. 1090069

2019 Annual Drinking Water Quality Report

We are pleased to provide you with our annual drinking water quality report. Last year, as in years past, your drinking water met all federal and state standards. We are proud to report that our system has never violated a maximum contaminant level or any other water quality standard. Although the EPA has issued an advisory, there is no water quality standard for PFOS/PFOA. They are contaminants found in firefighting foam. We have included PFOS/PFOA results in the Table of Detected Contaminants.

Our goal is to provide you with a safe and dependable supply of drinking water at an affordable rate. If you have any questions about this report or your water supply, please contact our customer service representatives at 215-675-3301. Our personnel are available 8:30 a.m. to 4:30 p.m. to answer your questions. We want our valued customers to be informed about their water utility. Our Board of Directors meet once a month on Mondays at 5:00 p.m. at the Authority building located at 415 Gibson Avenue, Warminster, PA 18974. Please call to confirm meeting dates.

Our water source is a combination of surface water from the Forest Park Water Treatment Plant in Chalfont, PA, and our groundwater wells. During 2019, we purchased 86% of our water supply from North Wales Water Authority (NWWA), and our groundwater wells supplied 14%. NWWA CCR report indicates that they also met water quality standards and can be accessed under Resources at www.nwwater.com. Their PWSID No. is 1460048, source ID 028.

A Source Water Assessment of the groundwater supply of our public drinking water system was completed in 2005 by the PA DEP. The Assessment has found that our wells were determined to be most susceptible to contamination from spills along roads, activities at industrial parks, applications of chemicals at Five Ponds Golf Course and runoff from the former NATC military facility. Overall, the Groundwater Supply in Warminster has a high risk of significant contamination. Summary reports of the Assessment will be available on the PA DEP website at www.elibrary.dep.state.pa.us/dsweb/Get/Document-64383/.

As a service to our customers, our automated notification system will allow us to contact you at times when your water may be affected or interrupted due to an emergency situation, a main break, or hydrant flushing. Please provide your preferred contact information to customer service representatives at 215-675-3301.

Contaminants in Drinking Water: 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 at 800-426-4791.

Health Effects

Arsenic: While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Educational Information

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 stormwater run-off and residential users.
- Pesticides & 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 organic chemicals, 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.

In order to assure 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. FDA and DEP 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 EPA Safe Drinking Water Hotline at 800-426-4791.

Information about Lead

If present, elevated levels of 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. Warminster Municipal Authority 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 two 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 <http://www.epa.gov/safewater/lead>.

Información Importante

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

TABLE OF DETECTED CONTAMINANTS

Inorganic Contaminant	MCL in CCR Units	MCLG	Highest Level Detected	Range of Detection	Violation	Sources of Contamination
1. Arsenic (ppb)	10	0	3.6 (2015)	0 – 3.6	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
2. Barium (ppm)	2	2	0.38 (2018)	0.25 – 0.38	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
3. Fluoride (ppm)	2	2	0.12 (2015)	0.12	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
4. Nitrate (ppm)	10	10	2.82	1.64 - 2.82	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; erosion of natural deposits.
5. Chromium, Total (ppm)	0.1	0.1	0.0039 (2015)	0.0039	No	Discharge from steel and pulp mills; erosion of natural deposits.
6. Antimony (ppb)	10	10	4 (2018)	0 - 4	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
Volatile Organic Compounds						
7. 1,1,1 Trichloroethane (ppb)	200	200	0.55 (2014)	0.55	No	Discharge from metal degreasing sites and factories.
8. Trichloroethylene (ppb)	5	0	0.93 (2016)	0.59 - 0.93	No	Discharge from metal degreasing sites and other factories.
9. Tetrachloroethylene (ppb)	5	0	0.64 (2016)	0.57 - 0.64	No	Discharge from factories and dry cleaners.
Disinfection Residuals and Disinfection Byproducts						
10. TTHMs {Total Trihalomethanes} (ppb)	80	N/A	51.2	10.5 - 51.2	No	Byproduct of drinking water chlorination.
Chloroform	Total must be less than 80	N/A	38.0	14.9 - 38.0	No	Byproducts of drinking water chlorination.
Bromoform			0	0		
Bromodichloromethane			10.2	1.6 - 10.2		
Chlorodibromomethane			4.7	1.4 - 4.7		
11. Haloacetic acids {HHA ₅ } (ppb)	60	N/A	19.6	8.5 - 19.6	No	Byproduct of drinking water chlorination.
12. Distribution Chlorine (ppm)	MRDL-4	MRD-LG-4	0.82	0.69 - 0.82	No	Water additive used to control microbes.
13. Entry Point Chlorine (ppm)			2.50	0.47 - 2.50	No	Water additive used to control microbes.
Radioactive Contaminants						
14. Gross Alpha (pCi/L)	15	0	14.64 (2014)	0-14.64	No	Erosion of natural deposits.
15. Combined Uranium (pCi/L)	30	0	1.547 (2017)	1.547	No	Erosion of natural deposits.
16. Radium-226 (pCi/L)	5	0	2.92 (2014)	0-2.92	No	Erosion of natural deposits.
17. Radium-228 (pCi/L)	5	0	1.61 (2014)	1.01-1.61	No	Erosion of natural deposits.
Chemical Contaminant	Action Level	90th Percentile Value		# of Sites above AL of total Sites	Violation	Sources of Contamination
18. Copper (ppm)	1.3	0.53		0 of 30	No	Corrosion of household plumbing.
19. Lead (ppb)	15	3.0		1 of 30	No	Corrosion of household plumbing.
Microbiological Contaminants		Presence of Coliform Bacteria			Violations	Sources of Contamination
20. Total Coliform Bacteria		0			No	Naturally present in the environment.
21. Fecal Coliform and E.coli		0			No	Human and animal fecal waste.
Unregulated Contaminants		Highest Level Detected (ppt)			Violation	Sources of Contamination
PFOS+PFOA (Warminster Wells)		Non-detect			No	Manmade chemical
PFOS+PFOA (NWWA Interconnections)		6.2			No	Manmade chemical

Terms and Abbreviations: **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment or other requirement 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 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 Reporting Level (MRL)** - the smallest measured concentration of a substance that can be reliably measured by using a given analytical method. **N/A**-not applicable. **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). We routinely monitor for contaminants in your drinking water according to federal and state laws. This table lists the results of our monitoring for the period of January 1, 2018 to December 31, 2018. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the Safe Drinking Water Act. The date is noted on the sampling results table.