2025 ANNUAL DRINKING WATER QUALITY REPORT

PWSID #: 7360007 Christiana Borough Water Authority

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. Have someone translate it for you or speak with someone who understands it.)

WATER SYSTEM INFORMATION:

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Bobbi Maser at 610-593-5199 or email manager@Christianaboro.org. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first Tuesday of the month at the Christiana Borough Hall at 7pm.

SOURCE(S) OF WATER:

Our sources are 2 ground water wells located near the intersection of Simmontown Road and Spring Road in Sadsbury Township with a 3rd well located within Lion's Park.

A Source Water Assessment of our source(s) was completed by the PA Department of Environmental Protection (Pa. DEP). The Assessment has found that our 2 Sadsbury Township wells are potentially susceptible to agricultural contaminates through the application of manure, fertilizer, herbicides and pesticides having a higher risk of nitrates or synthetic organic compounds (SOCs). Well 3 located within Lion's Park has little risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment Summary Reports eLibrary web page: www.elibrary.dep.lstate.pa.us/dsweb/View/Collection-10045. Complete reports were distributed to municipalities, water supplier, local planning agencies and PADEP offices. Copies of the complete report are available for review at the PA DEP Southcentral Regional Office, Records Management Unit at (717)-705-4700

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).

Monitoring Your Water:

We routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of January 1 to December 31, 2025. 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 has been noted on the sampling results table.

DEFINITIONS:

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 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.

Level 1 Assessment – A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

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.

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)

DETECTED SAMPLE RESULTS:

Chemical Contaminants								
Contaminant	**MCL in CCR Units**	**MCLG**	**Level Detected**	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
Barium (ppm)	2	2	0.077	0.054 - 0.077	ppm	2024	N	Discharge of drilling waters; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	3	3	ppb	2024	N	Discharge from steel and pulp mills; Erosion of natural deposits
Cyanide (ppb)	200	200	5	5	ppb	2024	N	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Fluoride (ppm)	2	2	0.34	0.34	ppm	2023	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm) Entry Point 101	10	10	7.98	7.4 - 7.98	ppm	2024	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate (ppm) Entry Point 102	10	10	8.69	5.48 to 8.69	ppm	2025	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Atrazine (ppb)	3	3	0.12	0.12	ppb	4/9/2024	N	Runoff from herbicide used on row crops
Haloacetic Acids (HAA) (ppb)	60	60	23.8	23.8	ppb	11/20/2023	N	By-product of drinking water disinfection
Perfluorooctanesulfonic Acid (PFOS)	18	14	2.91	2.5- 2.91	ppt	2024	N	Discharge from manufacturing facilities and runoff from land use activities
Perfluorooctanoic Acid (PFOA)	14	8	3.84	2.76 – 3.84	ppt	2024	N	Discharge from manufacturing facilities and runoff from land use activities
Trihalomethanes (TTHM) (ppb)	80	n/a	9.8	6.2 to 9.8	ppb	2024	N	By-product of drinking water disinfection
Chlorine (ppm)	MRDL= 4	MRDL=4	1.03	0.53 – 1.03	ppm	2025 Weekly	N	Water additive used to control microbes

Gross Alpha	15	0	6.66	0 to 6.66	µg/L	2024	N	Erosion of natural deposits
Combined Uranium	20	0	5.69	5.69	µg/L	2025	N	Erosion of natural deposits

*EPA's MCL for fluoride is four ppm. However, Pennsylvania has set a lower MCL to better protect human health.

Entry Point Disinfectant Residual

Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine Residual Entry Point 101	0.40	1.13	1.13 to 2.63	ppm	2025 Daily	N	Water additive used to control microbes
Chlorine Residual Entry Point 102	0.40	0.51	0.51 to 2.38	ppm	2025 Daily	N	Water additive used to control microbes

Lead and Copper

Contaminant	Action Level (AL)	MCLG	90th Percentile Value	Range of tap sampling results	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	2	2	ppb	0	N	Corrosion of household plumbing.
Copper	1.3	1.3	0.974	0.974	ppm	0	N	Corrosion of household plumbing.

Microbial (related to Assessments/Corrective Actions regarding TC positive results)					
Contaminants	**TT**	**MCLG**	**Assessments/ Corrective Actions**	**Violation Y/N**	**Sources of Contamination**
Total Coliform Bacteria	Any system that has failed to complete all the required assessments **or** correct all identified sanitary defects, is in violation of the treatment technique requirement	N/A	See detailed description under "Detected Contaminants Health Effects Language and Corrective Actions" section		Naturally present in the environment.

Microbial (related to E. coli)					
Contaminants	**MCL**	**MCLG**	**Positive Sample(s)**	**Violation Y/N**	**Sources of Contamination**
E. coli	Routine and repeat samples are total coliform-positive **and** either is *E. coli*-positive **or** system fails to take repeat samples following *E. coli*-positive routine sample **or** system fails to analyze total coliform-positive repeat sample for *E. coli.*	0			Human and animal fecal waste.
Contaminants	**TT**	**MCLG**	**Assessments/ Corrective Actions**	**Violation Y/N**	**Sources of Contamination**
E. coli	Any system that has failed to complete all the required assessments **or** correct all identified sanitary defects, is in violation of the treatment technique requirement	N/A	See description under "Detected Contaminants Health Effects Language and Corrective Actions" section		Human and animal fecal waste.

Raw Source Water Microbial					
Contaminants	**MCLG**	**Total # of Positive Samples**	**Dates**	**Violation Y/N**	**Sources of Contamination**
E. coli	0				Human and animal fecal waste.

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 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 stormwater run-off, 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 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 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. 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 the Environmental Protection Agency's *Safe Drinking Water Hotline* (800-426-4791

INFORMATION ABOUT LEAD

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. [NAME OF UTILITY] is responsible for providing high quality drinking water and is 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 [NAME OF UTILITY and CONTACT INFORMATION]. 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*.

Christiana Borough Authority prepared a service line inventory that includes the type of materials contained in each service line in our distribution system. This inventory can be accessed by contacting our office at 610-593-5199.