

2022 ANNUAL DRINKING WATER QUALITY REPORT

Knox Water Works
PWSID #: 6160005

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it 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 Lucas Klein at 814-797-1376. 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 the first Monday of each month at 7:00 PM in the borough office of the Municipal Building, 620 South Main Street, Knox, PA 16232.

SOURCES OF WATER:

Our water sources are:

Well number 3 – located within the boundaries of Knox Borough.

Well number 7 – located just outside the borough limits in Beaver Twp.

Well number 8 – located just outside the borough limits in Beaver Twp.

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, 2022. 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 AND ABBREVIATIONS:

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 – The minimum level of residual disinfectant required at the entry point to the distribution system.

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

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.

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

DETECTED SAMPLE RESULTS:

Chemical Contaminant	MCL In CCR Units	MCLG	Highest Level Detected	Range of Detections	Units	Violation Y/N	Sources of Contamination
Chlorine Distribution 2022	MRDL = 4	MRDL = 4	1.02 October 2022	0.53-1.02	ppm	N	Water additive used to control microbes
Trihalomethanes (TTHM) 9/14/22	80	80	25.80	only one sample required	ppb	N	By-product of drinking water chlorination
Arsenic 9/29/21	10	0	3.17	0 – 3.17	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium 9/29/21	2	2	0.378	0.35 – 0.378	ppm	N	Erosion of natural deposits
Selenium 9/29/21	50	50	8.44	6.21 – 8.44	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines

Entry Point Disinfectant Residual							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Lowest Sample Date	Violation Y/N	Sources of Contamination
Chlorine Distribution (2022)	0.40	0.73	0.73-1.41	ppm	10/27/22	N	Water additive used to control microbes.

Lead & Copper							
Contaminant	Action Level (AL)	MCLG	90th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Of TT Y/N	Sources of Contamination
Lead 2022	15	0	0	ppb	0 of 10 sampled	N	Corrosion of household plumbing Erosion of natural deposits
Copper 2022	1.3	1.3	0.177	ppm	0 of 10 sampled	N	Corrosion of household plumbing Erosion of natural deposits Leaching from wood preservatives.

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. Knox Borough 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>.

Violations. In 2022 we were required to monitor for 2 samples for Nitrate and Nitrite but only sampled 1 and also the week of 12/18/22 to 12/24/22 we failed to monitor for Distribution Chlorine as required. Public Notification regarding these violations is enclosed at the end of this report.

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).

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER FAILURE TO MONITOR

**ESTE INFORME CONTIENE INFORMACIÓN IMPORTANTE ACERCA DE SU AGUA POTABLE. HAGA QUE
ALGUIEN LO TRADUZCA PARA USTED, O HABLE CON ALGUIEN QUE LO ENTIENDA.**

Monitoring Requirements Not Met for Knox Water Works

PWSID # 6160005

Our water system violated drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. In 2022 we were required to monitor for 2 samples for Nitrate and Nitrite but only sampled 1 and also the week of 12/18/22 to 12/24/22 we failed to monitor for Distribution Chlorine as required and therefore cannot be sure of the quality of our drinking water during that time.

What should I do?

There is nothing you need to do at this time.

The table below lists the contaminants we did not properly test for during the last year, how often we are supposed to sample for Nitrate, Nitrite, Distribution Chlorine, and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were taken.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	When samples were taken
Distribution Chlorine	1 Sample Each Week of December 2022	4	Week of 12/19/21 to 12/25/21	11/30/22 12/7/22 12/14/22 12/28/22
Nitrate	Annual 2 Samples	1	3 rd Quarter of 2022	1/25/23
Nitrite	Annual 2 Samples	1	3 rd Quarter of 2022	1/25/23

What happened? What was done

In 2022 we were required to monitor for 2 samples for Nitrate and Nitrite but only sampled 1 and also the week of 12/18/22 to 12/24/22 we failed to monitor for Distribution Chlorine as required. Nitrate and Nitrite samples were taken on 1/25/23.

For more information, please contact Lucas Klein at 814-797-1376.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by Knox Water Works.

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Date distributed: May 31, 2023