

Knox County Utility Commission
Water Quality Report
January 1 through December 31, 2024

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Office Address: 1905 KY 930, Barbourville, KY 40906 Office Hours: Mon-Fri 8:00 am-4:30 pm Meeting Info: Monthly first Tuesday Knox Co Courthouse 5:30 pm

Our water supply is derived from four different surface water sources. Knox County Utility Commission has an intake in the Cumberland River. We also purchase water from three other utilities. Barbourville Utility Commission withdraws water from Laurel Lake and Cumberland River. Corbin City Utilities Commission withdraws from Corbin City Lake. Pineville Utility Commission withdraws water from Cannon Creek Lake. A Source Water Assessment has been completed for all four utilities. This assessment focuses on the susceptibility of the water source to contamination. All of the sources are under a moderate threat of contamination. The highest threats to these water supplies includes: accidental spills; untreated wastewater discharges; chemical management of right of ways; and siltation. Under certain circumstances contaminants could be released that would pose challenges to water treatment or even enter your drinking water. These activities and how they are conducted, are of interest to the entire community because they potentially affect your health and the cost of treating your water. The complete source water assessment plan can be reviewed at the Cumberland Valley Area Development District office in London, KY (606-864-7391).

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 may be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

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 may 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, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater runoff, agriculture or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, stormwater runoff, or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas production or mining activities).

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 to provide the same protection for public health.

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 (800-426-4791).

Some or all of these definitions may be found in this report:

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.

Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present.

Not Applicable (N/A) - does not apply.

Parts per million (ppm) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) - or micrograms per liter, ($\mu\text{g/L}$). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.

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

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. Knox County Utility Commission 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 Knox County Utility Commission at 606-546-5300. 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>.

Lead Sample Results Availability Information: We are required to periodically sample water from customer taps to determine lead and copper levels. EPA sets the lead action level at 0.15 mg/L (15 ppb). For a water system to be in compliance, at least 90% of tap water samples must have lead levels below this limit. This report contains the 90th percentile and range of our most recent sampling. The individual results for each location sampled can be reviewed at our office.

Service Line Inventory Information: To address lead in drinking water, EPA requires that all community water systems develop and maintain an inventory of service line materials. We have completed a service line inventory (SLI) and it is available for review at our office.

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. **Copies of this report are available upon request by contacting our office during business hours.**

A=Knox Co Utility Commission B=Barbourville Utilities C=City Utilities Commission Corbin D=Pineville Utility Commission

Regulated Contaminant Test Results

Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Inorganic Contaminants								
Barium [1010] (ppm)	2	2	A= B= C= D=	0.03 0.014 0.02 0.007	0.03 to 0.03 0.014 to 0.014 0.02 to 0.02 0.007 to 0.007	Apr-24 Feb-24 Feb-24 Apr-24	No No No No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	A= B= C= D=	0.75 0.69 0.86 0.75	0.75 to 0.75 0.69 to 0.69 0.86 to 0.86 0.75 to 0.75	Apr-24 Feb-24 Feb-24 Apr-24	No No No No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	A= C=	0.2 0.432	0.2 to 0.2 0.432 to 0.432	Aug-24 May-24	No No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Synthetic Organic Contaminants including Pesticides and Herbicides								
Dalapon [2031] (ppb)	200	200	D=	7.49333	BDL to 22.48 to	Apr-24		Runoff from herbicide used on rights of way
Disinfectants/Disinfection Byproducts and Precursors								
Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	A= B= C= D=	1.00 1.28 1.17 1	1 to 1 1.12 to 1.59 1 to 1.65 1 to 1.07	2024 2024 2024 2024	No No No No	Naturally present in environment.
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.								
Chlorine (ppm)	MRDL = 4	MRDLG = 4	A=	1.59 (highest average)	1 to 2	2024	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	A=	59 (high site average)	32 to 107 (range of individual sites)	2024	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	A=	63 (high site average)	21.6 to 82.8 (range of individual sites)	2024	No	Byproduct of drinking water disinfection.
Household Plumbing Contaminants								
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	A=	0.051 (90th percentile)	0 to 0.132	Jun-23	No	Corrosion of household plumbing systems
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	A=	0 (90th percentile)	0 to 0	Jun-23	No	Corrosion of household plumbing systems
Other Constituents								
Turbidity (NTU) TT * Representative samples	Allowable Levels		Source	Highest Single Measurement	Lowest Monthly %	Violation		Likely Source of Turbidity
Turbidity is a measure of the clarity of the water and not a contaminant.	No more than 1 NTU* Less than 0.3 NTU in 95% monthly samples		A= B= C= D=	0.08 0.04 0.24 0.073	100 100 100 100	No No No No		Soil runoff

Your drinking water has been sampled for a series of unregulated contaminants. Unregulated contaminants are those that EPA has not established drinking water standards. There are no MCLs and therefore no violations if found. The purpose of monitoring for these contaminants is to help EPA determine where the contaminants occur and whether they should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact our office during normal business hours.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for Knox County Utility Commission

Our water system violated drinking water requirements over the past year. *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. During the week of February 17, 2025 we did not monitor/test for TTHMs and HAAs and therefore cannot be sure of the quality of your drinking water during that time.*

WHAT SHOULD YOU DO?

There is nothing you need to do at this time.

The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for these contaminants, 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 SAMPLES SHOULD HAVE BEEN TAKEN	WHEN SAMPLES WERE TAKEN
TTHMs & HAAs	2 samples quarterly	0	Week of February 17, 2025	March 18, 2025

WHAT IS BEING DONE?

We are required to sample TTHMs and HAAs quarterly. We did the first quarter sampling, however we did not do the sampling within the time frame required. We were supposed to sample the week of February 17th and did not sample until March 18th. We regret this oversight and have modified our sampling schedule to ensure that all future samples are taken and reported to the Division of Water in the time frame required.

For more information, please contact Marshall Ramey at 606-546-5300 or P.O. Box 1630, Barbourville, KY 40906.

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 County Utility Commission.

KY Water System ID#: KY0610110 Date distributed: 5/30/2025