

**KNOX CHAPMAN UTILITY DISTRICT**  
**2024 Annual Drinking Water Quality Report**

We're pleased to present to you this year's **Annual Water Quality Report**. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. Knox Chapman Utility District is committed to ensuring the quality of your water. Our source of water is from the **French Broad River System**.

Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water source to potential contamination. The Tennessee Department of Environment and Conservation (TDEC), has prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving water to this system. Our water was rated as reasonably susceptible to potential contamination. The Source Water Assessment Plan can be viewed online at <https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html> or call TDEC at 1-888-891-TDEC (8332) to obtain copies.

This report shows our water quality and what it means. If you have any questions about this report, please contact Jeff McGaha at 865-577-4497 Extension 6. We want our valued customers to be informed about their water. Copies of this report are available over the Internet at Knox Chapman Utility District Web Site.

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

Knox Chapman Utility District Water Department routinely monitors for constituents in your drinking water according to Federal and State laws. The table on the following page shows the results of our monitoring for the period of January 1 to December 31, 2024. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose 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 at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791). 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 Chapman Utility District is responsible for providing high quality drinking water, but can't control the variety of materials used in plumbing components. When your water has been setting in your pipes for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using the 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, testing methods, and steps you can take to minimize exposure are available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

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. 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 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 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. In order to ensure that tap water is safe to drink, EPA and the Tennessee Department of Environment and Conservation prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

**IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER**

Our water system violated drinking water requirement over the past year. Even though these were not emergencies, as our customers, you have the right to know what happened and what we are doing or 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 indication of whether or not our drinking water meets health standards. During May 8<sup>th</sup>, 2024 we did not monitor or test for Total Haloacetic Acids and Total Trihalomethanes and therefore cannot be sure of the quality of your drinking water during this time.

Knox Chapman Utility District was required to monitor for Total Haloacetic Acids and Total Trihalomethanes during the second quarter of 2024 according to our Stage 2 Disinfection Byproduct (DBP) Locational Running Annual Averages (LRAA) Monitoring Plan. Knox Chapman Utility District sampled on 4/9/2024 instead of during the week of 5/8/2024 as scheduled in our Stage 2 DBP monitoring plan, indicating a monitoring violation.

THIS NOTICE IS BEING SENT BY KNOX CHAPMAN UTILITY DISTRICT, STATE WATER SYSTEM ID#:TN0000367, DATE DISTRIBUTED APRIL 2025.

There is nothing you need to do at this time. Total Haloacetic Acids and Total Trihalomethanes (DBP of Chlorine) requires that Knox Chapman Utility District collect 4 samples from different sites, every 3 months during the second week of the second month of each quarter and should have been taken May 8<sup>th</sup>, 2024 instead of April 9<sup>th</sup>, 2024. We have since reviewed our sampling plan schedule and are strictly staying on schedule.

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In the table found in this report you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

*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.

*Parts per billion (ppb) or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years.

*Parts per trillion (ppt) - or Nanograms per liter Nanograms/liter* - one part per trillion corresponds to one minute in 2,000,000 years.

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

*Millirems per year* - Measure of radiation absorbed by the body.

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

*Nephelometric Turbidity Unit (NTU)* - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU are just noticeable.

*Parts per quadrillion (ppq) or Picograms per liter (Picograms/l)* - one part per quadrillion corresponds to one minute in 2,000,000,000 years.

*Action Level (AL)* - The concentration of which, if exceeded, triggers treatment or other requirements, which a water system must follow.

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

*Maximum Contaminant Level* - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

*Maximum Contaminant Level Goal* - The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

*MRDL*- Maximum Residual Disinfectant Level means a level of a disinfectant added for water treatment that may not be exceeded at the customers tap without an unacceptable possibility of adverse health effects.

*MRDL (G)* - Maximum Residual Disinfectant Level Goal- The level of disinfectant below which there is no known or expected risk to health

### Water Quality Data

Contaminants	MCLG in CCR Units	MCL in CCR Units	Level Found CCR Units	Detection Range	Violation	Sample Date	Typical Source of Contaminants
Chlorine	MRDLG < 4 ppm	MRDL 4 ppm	1.59 ppm (Avg.)	0.48 – 2.06 ppm	No	2024	Disinfectant added to water to inactivate microorganisms.
Total Coliform	0	5% positive samples	*0	NA	No	2024	Naturally present in the environment.
Turbidity	N/A	< .3 NTU	.04 NTU	.01-.04 NTU	No	2024	Soil runoff.
Radioactive Contaminants:							
Inorganic Contaminants:							
Copper	< 1.3 ppm	AL=1.3 ppm	90 <sup>th</sup> = .07640ppm	.001-0.210 ppm	No	2023	Corrosion of household plumbing systems, erosion of natural deposits
Fluoride	2.0 ppm	4.0 ppm	0.66 ppm (Avg.)	0.60-0.75 ppm	No	2024	Erosion of natural deposits, water additive, promotes strong teeth, discharge from fertilizer and aluminum factories
Lead	0 ppb	AL=15 ppb	90 <sup>th</sup> = 3.64ppb	.002-15.2ppb	No	2023	Corrosion of household plumbing systems, erosion of natural deposits
Sodium	N/A	N/A	7.11 ppm	N/A	No	2024	Naturally present in the environment
Organic Contaminants:							
TTHM Trihalomethanes	N/A	80 ppb	50.15 ppb (LRAA)	20.9-79.7 ppb	No	2024	By - Product of drinking water chlorination
HAA5 Haloacetic Acids	N/A	60 ppb	52.65ppb (LRAA)	17.8-70.7 ppb	No	2024	By – Product of drinking water chlorination

**About the data:**

The data presented in this table is from testing done between Jan 1, 2024, thru Dec 31, 2024. We monitor for some contaminants less than once per year and for those contaminants, the date of the last sample is shown in the table. We met the treatment technique for turbidity, which is an indicator of filtration effectiveness, in 2024 with 100% of the samples less than 0.3 NTU. Out of 480 sites sampled for total coliform and E.Coli, we had 0 samples test positive in 2024. In our most recent round of lead and copper sampling, 1 out of 30 households exceeded the action level for lead, and 0 out of 30 households exceeded the action level for copper.