Hixson Utility District 2022 Water Quality Report

Most of the data presented in this table is from testing done between January and December of 2022.

CONTAMINANT	VIOLATION Y/N	LEVEL FOUND	RANGE OF DETECTION	DATE OF SAMPLE	MCLG	MCL	TYPICAL SOURCE OF CONTAMINATION
Chlorine	N	1.6 ppm	0.7 to 1.6 ppm	2022	4 ppm	4 ppm	Drinking water disinfectant
Fluoride	N	1.75 ppm	0.50 to 1.75 ppm	2022	4 ppm	4 ppm	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Total Coliform Bacteria (1) (2)	N	3	0	2022	N/A	TT	Naturally present in the environment
Turbidity	N	0.70 NTU	0.1 to 1.0 NTU	2022	N/A	TT	Soil runoff
Lead	N	90% =BDL	BDL to 8.13 ppb	2020	AL= 15 ppb	AL= 15 ppb	Corrosion of household plumbing; erosion of natural deposits
Copper	N	90%= 0.593 ppm	0.0167 to 0.652 ppm	2020	AL= 1.3 ppm	AL= 1.3 ppm	Corrosion of household plumbing; erosion of natural deposits
Sodium	N	1.34 ppm	1.26 to 1.34 ppm	2021	N/A	N/A	Erosion of natural deposits; used in water treatment chemicals
TTHM (Total Trihalomethanes)	N	7.07 ppb	5.24 to 7.07 ppb	2022	N/A	80 ppb	By-product of drinking water chlorination
HAA5 (Total Halocetic Acids)	N	1.43 ppb	1.38 to 1.43 ppb	2022	N/A	60 ppb	By-product of drinking water chlorination
Nitrate	N	0.780 ppm	0.482 to 0.780 ppm	2022	10 ppm	10 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Alpha Emitters	N	1.4 pCi/l	1.36 to 1.4 pCi/l	2014	0	15 pCi/l	Erosion of natural deposits
Combined Radium	N	0.96 pCi/l	BDL to 0.96 pCi/l	2014	0	5 pCi/l	Erosion of natural deposits
Barium	N	0.025 ppm	0.0132 to 0.0250 ppm	2021	2	2	Discharge of drilling waste, discharge from metal refineries; erosion from natural deposits

(1) Less than 5% of all samples can test positive with no backup samples testing positive. 3 samples tested positive with all back up samples testing negative.

(2) 969 samples were taken for the year with three samples testing positive.

Abbreviations and Definitions

MCLG: Maximum Contaminant Level Goal, or 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.

MCL: Maximum Contaminant Levels, or the highest of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.

Parts per million (ppm) or Milligrams per liter (mg/1): Explained in relation to time and money, 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 (ug/l): Explained in relation to time and money, one part per billion corresponds to one minute in 2,000 years or a single penny in $10 million.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of the water. Turbidity in excess of five (5) NTU is just noticeable to the average person.

TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

BDL: Below detectable level.

IRON CONTENT: Iron occurs naturally in our raw water and occasionally accumulates in the distribution system. It shows up as "red" or "rusty" water at your tap. Although you do not want to drink water that is not clear, iron is not considered to be a hazard to your health. We test for iron daily and it is usually around 0.02 ppm. The aesthetic limit for iron is 0.3 ppm.

MRDL: Maximum Residual Disinfectant Level, the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.

MRDLG: Maximum Residual Disinfectant Level Goal, 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 disinfectant use to control microbial contaminants.

IS MY DRINKING WATER SAFE?

Yes, our water meets all Environmental Protection Agency (EPA) health standards. We have conducted numerous tests for over 80 contaminants that may be present in drinking water. As shown in the chart, only 10 of these contaminants were detected and all were at safe levels, well below the EPA limits.

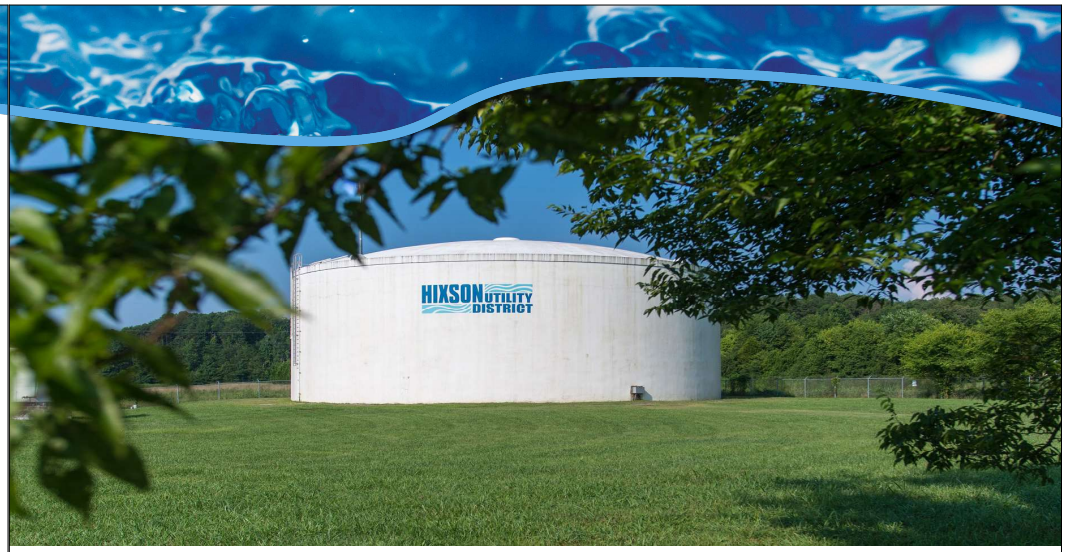
WHAT IS THE SOURCE OF MY WATER?

Your water, which is true ground water, comes from the Chickamauga watershed, a Cambrian-Ordovician carbonate underground aquifer. 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 this water system.

The SWAP Report assesses the susceptibility of untreated water sources to potential contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. Water sources have been rated as reasonably susceptible (high), moderately susceptible (moderate) or slightly susceptible (low) based on geologic factors and human activities in the vicinity of the water source. The Hixson Utility District Water System sources rate as reasonably susceptible (high) to potential contamination.

An explanation of Tennessee's SWAP, the source of Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html or you may contact Tom Bockman at Hixson Utility District at 423.877.3513 between 8 am and 4 pm Monday through Friday, or TDEC at 1.888.891.8332 to obtain copies of specific assessments.

Your water comes from natural underground sources owned by Hixson Utility District and is withdrawn at the two different well fields. The high natural water quality at both Cave Springs and Walker's Corner well fields meet EPA standards to avoid filtration.A Wellhead Protection Plan is available for your review by contacting Tom Bockman at 423.877.3513.



WHY ARE CONTAMINANTS IN MY WATER?

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1.800.426.4791.

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 land surface or through the ground, it dissolves naturally-occuring 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:

- 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 volitalic 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 the result of oil and gas production and mining activities.

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

HOW CAN I GET INVOLVED?

We invite you to attend our Board of Commissioners' meeting on the third Wednesday of each month at 3pm at our office.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN ITS OPERATIONS?

Both the EPA and the TDEC require us to test and report on our water on a regular basis to ensure its safety. We have met all of these requirements and want you to know that we pay attention to all the rules.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as patients with cancer who are undergoing chemotherapy, people who have undergone organ transplants, those with HIV, AIDS or other immune system disorders, some elderly people and infants may be particularly at risk from infections. These people should seek advice from their healthcare providers about not only their drinking water, but food preparation, personal hygiene and precautions in Centers for Disease Control guidelines on the risk of infection by Cryptosporidium and other microbiological contaminants are available by calling the EPA's Safe Drinking Water Hotline at 1.800.426.4791.

WHAT ELSE DO I NEED TO KNOW?

We work around the clock to provide top-quality water to every tap. We ask that all our customers help us protect our water resources, which are the heart of our community, our way of life and our children's future.

WHAT ABOUT LEAD IN DRINKING WATER?

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. Hixson Utility 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 the drinking water, testing methods, and steps you can take to minimize exposure, call the Safe Drinking Water Hotline at 1.800.554.1404 or see http://www.epa.gov/safewater/lead.