


# ANNUAL WATER QUALITY REPORT

A dynamic splash of clear water against a blue gradient background. The splash is captured in mid-air, with numerous droplets and a central crown-like shape. The water is highly reflective, showing highlights and shadows that emphasize its clarity and movement. The background transitions from a deep blue on the left to a lighter blue on the right.

*Presented By*  
City of Pikeville



Once again, the City of Pikeville is proud to present our Annual Water Quality Report covering the period between January 1 and December 31, 2022. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day—at all hours—to deliver the highest-quality drinking water without interruption. Although the challenges ahead are many, we feel that by relentlessly investing in customer outreach and education, new treatment technologies, system upgrades, and training, the payoff will be reliable, high-quality tap water delivered to you and your family.

## **How do I Participate in Decisions Concerning my Drinking Water?**

Public participation and comments regarding water are encouraged at regular City Council Meetings, scheduled on the second Monday of every month at 6:30 pm in the City Council Chambers at City Hall. To request permission to address the City Council, please contact the City Recorder at (423) 447-2919, ext. 104.

## **Source Water Assessment**

A Source Water Assessment Plan (SWAP) is now available from the Tennessee Department of Environment and Conservation (TDEC). This plan 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, moderately susceptible or slightly susceptible based on geologic factors and human activities in the vicinity of the water source.

If you would like to review the SWAP, please feel free to contact TDEC during regular office hours or it can be viewed online at [https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-](https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html)



## **Is my Drinking Water Safe?**

Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 80 contaminants that might be in drinking water. As you'll see in the chart in the back, we only detected 8 of these contaminants.

## **Your Water Source**

Your water, which is ground water, comes from five (5) wells. 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 water system. The City of Pikeville also purchased some water on a temporary basis from Dunlap during drought conditions. Pikeville and Dunlap sources are rated as moderately susceptible to potential contamination. An explanation of Tennessee's SWAP, the Source of Water summaries, susceptibility scorings and the overall TDEC report can be viewed online at <https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html>. A wellhead protection plan is available for your review by contacting Lavaughn Brock at the City of Pikeville between 8am-4:00pm weekdays.

## All Water Has Contaminants

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

**Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.**

**For more information about your drinking water, please call Lavaughn Brock at 423-447-3451.**

## Important Health Information

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 under-gone 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 not only their drinking water, but food preparation, personal hygiene, and precautions in handling infants and pets from their health care 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 (800-426-4791).



## Substances That Could Be in Water

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:

- ⇒ 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.



## Water Regulations

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 bottle water which must provide the same protection for public health.

## 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. The City of Pikeville 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://epa.gov/safewater/>



## Water System Security

Following the events of September 2001, we realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities, including treatment plants, tanks, fire hydrants, etc. to 423-447-3451.



## Think Before You Flush

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of Tennessee's waterways by disposing in one of our permanent pharmaceutical take back bins. There are nearly 100 take back bins located across the State.

To find a convenient location please visit: <https://www.tnpharm.org/patient-resources/disposing-of-unwanted-drugs/>

**Questions** For technical water quality information, or for information regarding water distribution, pressure, discolored water, or lead and copper sampling, contact Lavaughn Brock at 423-447-3451.

## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, is a complete list of all our analytical results from our Water Quality Data Report. Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

Regulated Substances									
SUBSTANCE (Unit of Measure)	YEAR SAMPLED	UNIT MEASUREMENT	MCL	MCLG	AMOUNT DETECTED	LEVEL DETECTED	RANGE OF DETECTIONS	VIOLATIONS	TYPICAL SOURCE
Total Coliform Bacteria (RTCR)	2022		TT Trigger	0		0		No	Naturally present in the environment
Turbidity <sup>1</sup>	2022	NTU	TT	N/A	0.02 - 0.25	0.25	0.02 – 0.25	No	Soil runoff
Copper <sup>2</sup>	2020	ppm	AL=1.3	1.3		90 <sup>th</sup> % = 0.0615		No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead <sup>2</sup>	2020	ppb	AL=15	0		90 <sup>th</sup> % = <0.5		No	Corrosion of household plumbing systems, erosion of natural deposits
Sodium	2022	ppm	N/A	N/A		7.66		No	Erosion of natural deposits; used in water treatment
Nitrate (as Nitrogen)	2022	ppm	10	10		0.768		No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHM [Total trihalomethanes]	2022	ppb	80	N/A	26.90 - 41.60	LRAA 41.60	26.90 – 41.60	No	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	2022	ppb	60	N/A	14.80 - 22.40	LRAA 22.40	14.80 – 22.40	No	By-product of drinking water disinfection
Total Organic Carbon	Waived	ppm	TT	TT				No	Naturally present in the environment
Chlorine	2022	ppm	MRDL 4	MRDLG 4	1.5 - 2.6	Avg. 2.21	1.5 – 2.6	No	Water additive used to control microbes

<sup>1</sup>100% of our samples were below the turbidity limit.

<sup>2</sup>During the most recent round of Lead and Copper testing, 0 out of 20 households sampled contained concentrations exceeding the action level for lead.

## Definitions

**90<sup>th</sup>%:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

**MCL (Maximum Contaminant Level):** The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. To understand the possible health effects described for many regulated constituents, 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.

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

**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 the use of disinfectants to control microbial contaminants.

**Below Detection Level (BDL):** Laboratory analysis indicates that the contaminant is not present at a level that can be detected.

**Non-Detect (ND):** Laboratory analysis indicates that the contaminant is not present at or above detection limit. For Lead use the laboratory detection limit.

**Parts Per Million (ppm) or Milligrams per liter (mg/l):** Explained as a relation to time and money as one part pr million corresponds to one minute in two years or a single penny in \$10,000.

**Parts Per Billion (ppb) or Micrograms per liter:** Explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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

**Millirems per year (mrem/yr):** 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 is just noticeable to the average person.

**RTCR (Revised Total Coliform Rule):** This rule went into effect on April 1, 2016, and replaces the MCL for total coliform with a Treatment Technique Trigger for a system assessment.

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