



**2022 Annual Drinking Water Quality Report
Sevierville Water Department**

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. We are committed to ensuring the quality of your water. Our source of water is from the **French Broad River System**. Our water plant is a state of the art membrane filter treatment facility which will continue to deliver safe drinking water.

Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water supply to contamination. The Tennessee Department of Environment and Conservation (TDEC), has prepared a Source Water Assessment Program (SWAP) Report for the water supply serving water to this system. Our water was rated as somewhat 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 Shane Carr, Chief Water Plant Operator at 865-868-1538. We want our valued customers to be informed about their water. Copies of this report are available over the Internet at the City of Sevierville 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. Sevierville 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, 2022. 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. Sevierville Water Department 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>.

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	1.6 ppm (Avg.)	0.9 – 2.0 ppm	No	2022	Disinfectant added to water to inactivate microorganisms
Chlorine Dioxide	MRDLG= 800 ppb	MRDL= 800 ppb	300 ppb (Avg.)	70 – 770 ppb	No	2022	Disinfectant added to water to inactivate microorganisms, and as a sequestering agent for iron and manganese
Total Coliform	0	5% positive samples	*0	NA	No	2022	Naturally present in the environment
Turbidity	N/A	< .3 NTU	.029 NTU	.013 – .067 NTU	No	2022	Soil runoff
Radioactive Contaminants:							

Gross Alpha	0 pCi/l	15 pCi/l	.061 pCi/l	0 -0.061 ppm	NO	2015	Erosion of natural deposits
Combined Radium (226 & 228)	0 pCi/l	5 pCi/l	.942 pCi/l	0 -0.942 ppm	NO	2015	Erosion of natural deposits
Inorganic Contaminants:							
Chlorite	0.8 ppm	1.0 ppm	.497 ppm (Avg.)	.147 - .993 ppm	No	2022	By - Product of drinking water chlorination using chlorine dioxide
Copper	< 1.3 ppm	AL=1.3 ppm	90 th %=.0512 ppm	ND -.245 ppm	No	2020	Corrosion of household plumbing systems, erosion of natural deposits
Fluoride	4.0 ppm	4.0 ppm	.52 ppm (Avg.)	.04 – 1.11 ppm	No	2022	Erosion of natural deposits, water additive, promotes strong teeth, discharge from fertilizer and aluminum factories
Iron (Not Required-Secondary Standard)	0 ppm	.3 ppm	.005 ppm (Avg.)	0 - .024 ppm	No	2022	Naturally present in the environment
Manganese (Not Required-Secondary Standard)	0 ppm	.05 ppm	.011 ppm	0 - .033 ppm	No	2022	Naturally present in the environment
Asbestos	7 MFL	7 MFL	0.19 MFL	N/A	No	2020	Decay of asbestos cement water mains; erosion of natural deposits
Lead	0 ppb	AL=15 ppb	90 th %=1.00 ppb	ND-5.75 ppb	No	2020	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	10 ppm	10 ppm	.454 ppm	N/A	No	2022	Runoff from fertilizer, leaching from septic tanks, sewage, erosion of natural deposits
Sodium	N/A	N/A	7.39 ppm	N/A	No	2022	Naturally present in the environment
Organic Contaminants:							
TTHM Trihalomethanes	N/A	80 ppb	59.4 ppb (LRAA)	26.2-120.0 ppb	No	2022	By - Product of drinking water chlorination
HAA5 Haloacetic Acids	N/A	60 ppb	51.3 ppb (LRAA)	21.8-55.5 ppb	No	2022	By – Product of drinking water chlorination

About the data:

The data presented in this table is from testing done between Jan 1, 2022, thru Dec 31, 2022. 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 2022 with 100% of the samples less than 0.3 NTU. Out of 440 sites sampled for total coliform and E.Coli, we had 0 samples test positive in 2022. We also had 0 out of 30 households sampled during our most recent round of lead and copper testing that contained concentrations exceeding the action level.

Insert ID: CCR-16 (Amended)