

**CITY OF MCMINNVILLE
WATER DEPARTMENT
2018
ANNUAL WATER QUALITY REPORT**



We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform each customer about the quality of water delivered to you each day. Our constant goal is to provide each customer with a safe and dependable supply of drinking water.

City of McMinnville Annual Water Quality Report 2018

What is the source of my water?

Your water, which is surface water, comes from the Barren Fork River. 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 supplies serving this water system. The SWAP Report assesses the susceptibility of public water supplies to *potential* contamination. 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 City of McMinnville Water System sources rated as moderately susceptible to potential contamination.

An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at <https://www.tn.gov/environment/article/wr-wq-source-water-assessment> or you may contact the Water System or TDEC at 1-888-891-TDEC to obtain copies of specific assessments. Please keep in mind that our water system has taken precautions to protect our customers from potential contamination from the source.

Our Board of Mayor and Aldermen meets on the second and fourth Tuesday of each month at 7:00 p.m. at City Hall. Please feel free to attend these meetings.

For more information about this report or for any questions relating to your drinking water, please call **Ricky Morton, Plant Manager, at 931-473-2593.**

Substances Expected to be in Drinking Water

The sources of drinking water (both tap 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.

Substances that may be present in source water include:

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 storm water 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 storm water 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 storm water runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or be the result of oil and gas production and 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. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. 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 can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Drinking Water and People with Weakened Immune Systems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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/CDC (Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Este informe contiene la información importante sobre su agua potable. Haga por favor que sea traducido por un amigo ó por alguien que lo entiende y puede traducirlo para usted.

Questions? Call U.S. EPA's Safe Drinking Water Hotline at 1-800-426-4791.

REGULATED SUBSTANCES

Substance (units)	Year Sampled	MCL	MCLG	Amount Detected	Range Low-High	Violation	Typical Source
Chlorine (ppm)	2018	MRDL = 4	MRDLG = 4	1.93 avg.	1.68 – 2.27	No	Water additive used to control microbes.
Fluoride (ppm)	2018	4	4	.32 avg.	.27 - .35	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (ppm)	2018	10	10	2.07		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
TTHMs [Total trihalomethanes] (ppb)	2018	80	0	36 avg.	14 – 71	No	By-product of drinking water chlorination.
THAAs [Total Halo acetic Acids] (ppb)	2018	60	0	37 avg.	10 - 54	No	By-product of drinking water chlorination.
Turbidity (NTU)	2018	TT	N/A	.10 avg.	.05 - .30	No	Soil runoff.
TOCs [Total Organic Carbons] (ppm)	2018	TT	N/A	1.18 avg.	.67 – 1.83	No	Naturally present in environment.
Sodium (ppm)	2018	N/A	N/A	8.26		No	Naturally present in environment.

Substance (units)	Year Sampled	Action Level	MCLG	Amount Detected	Number of Homes Above Action Level	Violation	Typical Source
Copper (ppm)	2017	1.3	1.3	90th % = 0.118	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead (ppb)	2017	15	0	90th % = 1.77	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.

FOOTNOTES

The simple fact is bacteria and other microorganisms inhabit our world. They can be found all around us; in our food; on our skin; in our bodies; and, in the air, soil and water. Some are harmful to us and some are not. Coliform bacteria are common in the environment and are generally not harmful themselves. The presence of this bacterial form in drinking water is a concern because they indicate that the water may be contaminated with other organisms that can cause disease. Throughout 2018, we tested 231 samples for coliform bacteria. All coliform bacteria results were negative.

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of the monthly samples must be below 0.15 NTU.

TTHM Health Effects Language- Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems and may have an increased risk of getting cancer.... EPA establishes MCLs using the assumption that if most people drink 2 liters of water containing disinfection byproducts in the excess of the MCL every day for 70 years, then 1 person in 10,000 may have an increased risk of cancer.

Lead Health Effects Language – *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. McMinnville Water System 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://www.epa.gov/safewater/lead>*

TOCs – We met the treatment technique required for Total Organic Carbon.

TABLE DEFINITIONS

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

BDL- below detection level

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.

Nephelometric Turbidity Units (NTU): Measurement of the clarity, or turbidity, of water.

Parts per billion (ppb): One part per billion (or micrograms per liter) is equivalent to one penny in \$10,000,000. **Parts per million (ppm):** One part per million (or milligrams per liter) is equivalent to one penny in \$10,000.

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

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. For more information, please contact Ricky Morton at 931-473-2593.

Cryptosporidium- Cryptosporidium is a microbial parasite which is found in surface water throughout the U.S. Although Cryptosporidium can be removed by filtration, the most commonly used filtration methods cannot guarantee 100 percent removal. Monitoring of our source water indicated the presence of cryptosporidium in 1 out of 9 samples tested. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals are able to overcome the disease within a few weeks. However, immuno-compromised people have more difficulty and are at greater risk of developing severe, life threatening illness. Immuno-compromised individuals are encouraged to consult their doctor regarding appropriate precautions to take to prevent infection. For more information on Cryptosporidium, contact the Safe Drinking Water Hotline (800-426-4791).

The City of McMinnville has implemented EPA approved Treatment Techniques that insure the removal of Cryptosporidium in the drinking water.

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: <http://tn.gov/environment/article/sp-unwanted-pharmaceuticals>.

What's in My Water?

We are pleased to report that during the past year, the water delivered to your home or business complied with, or did better than, all state and federal drinking water requirements. For your information, we have compiled a list in the following table showing what substances were detected in our drinking water during 2018. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

***Our after Hours/Emergency
Number is (931) 473-2279.***