

# Annual Drinking Water Quality Report

## City of Townsend

PWSID#00344

110 Broadway

Townsend, MT 59644

We're very pleased to provide you with the annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. We obtain our water from three wells. They are located at 508 Broadway, 100 Railroad Avenue, and 519 North Oak.

We're pleased to report that our drinking water is safe and meets federal and state requirements.

If you have any questions about this report or concerning your water, please contact Eric Crusch at (406) 266-3911. If you want to learn more about our water, please attend any of our regularly scheduled meetings. They are held on the first and third Tuesday of every month.

The Townsend Water Treatment Plant routinely monitors for constituents in your drinking water according to Federal and State laws. The following table shows the results of any detects in our monitoring for the period of **January 1<sup>st</sup> to December 31<sup>st</sup>, 2023**. For constituents that are not monitored yearly, we have reviewed our records back to the last time the constituent was monitored.

Parameter	Date	90th % value	Units	Action Level	# Over Action AL	Source of Contamination
Lead	07/19/22	2.0	ppb	15	1	Household plumbing
Copper	07/19/22	0.16	ppm	1.3	0	Household plumbing

In the tables above and below 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:

*Parts per billion (ppb) or Micrograms per liter (ug/l)* - one part per billion corresponds to one minute in 2000 years or a single penny in \$10,000,000.

*Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.

*Action Level* - the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that 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. MCLs are set as close to the MCLGs 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. MCLGs allow for a margin of safety.

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

*Level 1 Assessment*- A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

*Level 2 Assessment*- A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

TEST RESULTS								
Contaminant	Violation Y/N	Sample Date	Highest Level Detected	Range	Unit Measurement	MCLG	MC L	Likely Source of Contamination
<b>Inorganic Contaminants</b>								
Nitrate + Nitrite as N	N	01/10/23	2.27	2.12-2.27	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Fluoride	N	03/15/22	0.7	0.3-0.7	ppm	4	4	Water additive which promotes strong teeth, erosion of natural deposits
Arsenic	N	03/15/22	9	3-9	ppb	0	10	Erosion of natural deposits
Barium	N	03/15/22	0.09	0.09-0.09	ppm	0	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Radioactive Contaminants</b>								
Combined Radium 226/228	N	03/15/22	0.7	0-0.7	pCi/L	0	5	Erosion of Natural deposits.
Gross alpha excluding radon and uranium	N	03/15/22	11	2.2-11	pCi/L	0	15	Erosion of Natural deposits.
Uranium	N	03/15/22	5	5-5	ug/l	0	30	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.
<b>Microbial Contaminants</b>								
Parameter	Violation Y/N	Date	Highest number of positive samples in one month		Unit Measurement	MCLG	MCL	Likely Source of Contamination
Coliform Bacteria	N	Monthly	8/8/23-1 9/12/23-1		Present/Absent	0	0	Soil runoff

**Violations-** The Revised Total Coliform Rule (RTCR) seeks to prevent waterborne diseases caused by E. coli. E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches or other symptoms. We failed to collect follow-up samples within 24 hours of learning of the total coliform-positive sample. These needed to be tested for fecal indicators from all sources that were being used at the time the positive sample was collected. The violation started 10/13/2021 and ended 08/09/2023..

**Total Coliform:** Total Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Our system had 1 positive total coliform bacteria in the month of August and September. The positive samples were on different locations for each month. We were required to take 5 (five) follow-up samples. These did not indicate any total coliform. The positive was attributed to sampling error.

**Nitrates:** As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

**Uranium –** Some people who drink water containing uranium in excess of the MCL over many years may have increased risk of getting cancer and kidney toxicity.

**Arsenic:** Some people who drink water containing Arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. EPA's standard balances the current understanding of Arsenic's possible health effects against the costs of removing Arsenic from drinking water. EPA continues to research the health effects of low levels of Arsenic.

**Copper:** Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink the water contains copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

**Fluoride:** Some people who drink water containing Fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children's teeth, usually in children less than nine years old. Mottling also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gum.

**Lead:** Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

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. City of Townsend 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 the 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>.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials.

All 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCL's are set at very stringent levels. 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-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 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).

We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

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