

City of Mount Pleasant Water Treatment Water Quality Report 2023



Is my drinking water safe?

Absolutely! The City of Mount Pleasant Water Treatment Plant is proud to report that your drinking water meets or exceeds all federal and state drinking water standards set by the Environmental Protection Agency (EPA). The water is tested and checked continuously each day to make sure it is safe. We have conducted numerous tests for over 80 contaminants that may be in drinking water.

As you will note from the chart in this brochure our system did not violate any EPA or state regulations for the monitoring period of January 1, 2023 to December 31, 2023. Although monitoring detected the presence of contaminants in small quantities, they tested well below the Maximum Contaminant Levels (MCL) established by the EPA and regulated by Tennessee Department of Environment and Conservation (TDEC).

What is the source of my water?

Your water, which is ground water under the influence of surface water, comes from natural springs located south and southeast of the City of Mount Pleasant. A small amount of your water came from the Columbia Water System. Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water source for **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, moderately susceptible or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The sources rated as reasonably 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 the following web address, <https://www.tn.gov/environment/program-areas/wrwater-resources/water-quality/source-waterassessment.html> or you may contact the Mount Pleasant Water System to obtain copies of specific assessments.

A wellhead protection plan is available for your review by contacting the manager of the Mt. Pleasant Water System between 7:00A.M. to 3:00P.M. weekdays@ 379-7717.

Why are there 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 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 the Mount Pleasant Water System Manager Ted Howell at (931) 379-7717.

How can I get involved?

Our Water Board meets on the third Tuesday of every month at 6:00 p.m. at City Hall. Please feel free to participate in these meetings.

Is our water system meeting other rules that govern our operations?

The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met all of these requirements. Results of

unregulated contaminant analysis are available upon request. We want you to know that we pay attention to all the rules.

Other Information

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.
- 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 and the Tennessee Department of Environment and Conservation prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. Mount Pleasant's water treatment processes are designed to reduce any such substances to levels well below any health concern. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 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).

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. Mount Pleasant 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>

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, pumping stations, tanks, fire hydrants, etc. to (931) 379-7717.

Mount Pleasant Water Quality Data

What does this chart mean?

- **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 Level, or 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. 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.
- **MRDL**: Maximum Residual Disinfectant Level or MRDL: 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.
- **AL** - **Action Level**, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **Non-Detects (ND)** - laboratory analysis indicates that the contaminant is not present.
- **Parts per million (ppm)** – explained as a relation to money as one part per million corresponds to a single penny in \$10,000.
- **Parts per billion (ppb)** - explained as a relation to money one part per billion corresponds to a single penny in \$10,000,000.
- **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.
- **TT** - Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.
- **CWS** – Columbia Water System

Contaminant	Violation Yes/No	Level Detected	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	No	0		2023		0	< 2 positive of monthly samples	Naturally present in the environment
Turbidity ⁽¹⁾	No	0.13	.020 – 0.21	2023	NTU	N/A	TT	Soil runoff
Barium	No	0.0210	N/A	2023	ppm	2	2	Discharge from drilling waste; discharge from metal refineries; erosion of natural deposits
Copper (2) Jan-June July-Dec	No	90 th %= 1.18 .698	.0114-1.38 .0118-1.02	2023	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (2)	No	90 th %= ND	ND-ND	2023	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Sodium	No	4.05	N/A	5/19/21	ppm	N/A	N/A	Erosion of natural deposits; used in water treatment
Nitrate (as Nitrogen)	No	0.225	N/A	8/2/23	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks sewage; erosion of natural deposits
Alpha Emitters	No	0.823	N/A	2021	pCi/L	0	15	Erosion of natural deposits

TTHM [Total trihalomethanes]	No	46.2	18.3-58.4	2023	ppb	n/a	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	No	48.4	18.7-58.4	2023	ppb	N/A	60	By-product of drinking water disinfection.
(TOC)Total Organic Carbon⁽³⁾	No	1.10	ND -1.10	2023	ppm	TT	TT	Naturally present in the environment.
Atrazine	No	ND	N/A	5/13/21	ppb	3	3	Runoff from herbicide used on row crops
Chlorine	No	1.66	1.6-2.4	2023	ppm	MRDLG 4	MRDL 4	Water additive used to control microbes.
2,4-D	No	.096	ND-.096	2023	ppb	<0.1	70	Runoff from herbicide used on row crops

1. Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system. We met the treatment technique requirement for turbidity with > 95 % of samples below the turbidity limit of 0.3 NTU every month.

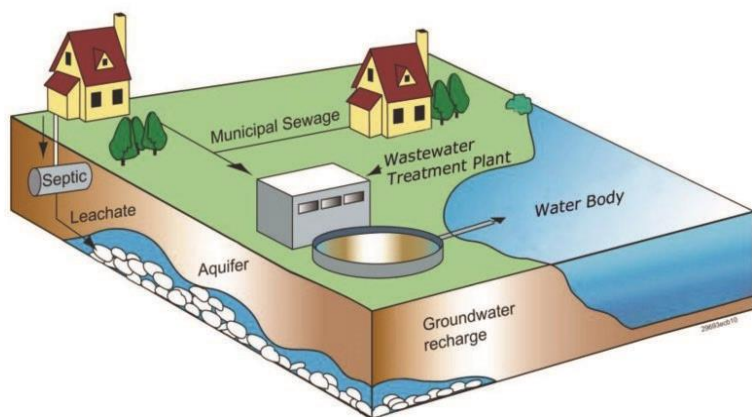
2. During the most recent round of Lead and Copper testing, 0 out of 40 households sampled contained concentrations exceeding the action level.

3. We met the treatment technique requirements for Total Organic Carbon (TOC) in 2023.

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 340 take back bins located across the state in all 95 counties, to find a convenient location please visit:

<http://tdeconline.tn.gov/rxtakeback/>



A small amount of your water came from the Columbia Water System. The following is a data table of their results.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
2,4-D (ppb)	2023	70	70	1.5	0.23–1.5	No	Runoff from herbicide used on row crops
Alpha Emitters (pCi/L)	2021	15	0	0.823	NA	No	Erosion of natural deposits
Atrazine (ppb)	2023	3	3	0.114	NA	No	Runoff from herbicide used on row crops
Barium (ppm)	2023	2	2	0.0210	NA	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine (ppm)	2023	[4]	[4]	1.54	1.00–2.50	No	Water additive used to control microbes
Chlorite (ppm)	2023	1	0.8	0.208	0.035–0.464	No	By-product of drinking water disinfection
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2023	60	NA	46.88	16.1–58.5	No	By-product of drinking water disinfection
Nitrate (ppm)	2023	10	10	0.573	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Organic Carbon [TOC] (percent removal)	2023	TT = 25%	NA	41	NA	No	Naturally present in the environment
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2023	80	NA	50.15	11.6–69.7	No	By-product of drinking water disinfection
Turbidity ¹ (NTU)	2023	TT	NA	0.130	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2023	TT = 95% of samples meet the limit	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2022	1.3	1.3	0.0694	0/30	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2022	15	0	ND	0/30	No	Lead service lines; corrosion of household plumbing systems, including fittings and fixtures; erosion of natural deposits

UNREGULATED SUBSTANCES					
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE	
Perfluorobutanesulfonic Acid [PFBS] (ppb)	2023	0.0029	NA	NA	
Perfluorohexanoic Acid [PFHxA] (ppb)	2023	0.0032	NA	NA	
Perfluoropentanoic Acid [PFPeA] (ppb)	2023	0.0029	NA	NA	
Sodium (ppm)	2023	7.37	NA	NA	

¹Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.



The state recommends monitoring 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.