Annual Drinking Water Quality Report

Sun Prairie Village County MT0000521

Annual Water Quality Report for the period of January 1 to December 31, 2022

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

For more information regarding this report please contact Janet Fulmer, General Manager at (406) 965-3944.
Public Participation Opportunities: District Monthly Board Meetings are held at the District Office, 1047 Grant Drive, Great Falls, MT 59404, every second Tuesday at 6:30 PM.

Sources of Drinking 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.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

Contaminants 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 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 prescribes regulations that limit the number of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 healthcare providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (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. We are responsible for providing high-quality drinking water, but we 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 are available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Source Water Information for **Sun Prairie Village County**

which is classified as a *Ground Water* system

The source water assessment report for your water system provides additional information on your source water's susceptibility to contamination. To access this report please go to:
https://deq.mt.gov/water/Programs/dw-sourcewater
On the webpage look under "4. Make Results of the Delineation and Assessment Available to the Public" and then click on the grey box called "Review Source Water Assessment Reports".

Sun Prairie Village County utilizes the listed water sources below:

Water Source Name	Water Source Type
WELL 1 GWIC 274667	Well
WELL 4 GWIC 274670	Well
WELL 3 GWIC 274669	Well
WELL 2 GWIC 274668	Well

Water Quality Test Results Definitions

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Avg: Regulatory compliance with some MCLs is based on running an annual average of monthly samples.
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.
Maximum Contaminant Level or MCL: 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.
Maximum Contaminant Level Goal or 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.
Maximum residual disinfectant level or MRDL: The highest level of disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the control of microbial contaminants.
Maximum residual disinfectant level goal or MRDLG: 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.
N/A: Not applicable.
ND: Not detectable at testing limit.
Nephelometric Turbidity Unit (NTU) − Measure of the clarity or cloudiness of water. Turbidity more than 5 NTU is just noticeable to the typical person.
Picocuries per liter (pCi/L) − Measure of the radioactivity in water.
ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
Secondary Maximum Contaminant Level (SMCL): SMCLs are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health at the SMCL.
Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

The State of Montana DEQ requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one-year-old.

Lead and Copper								
Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09-24-2020	1.3	1.3	0.236	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	09-24-	0	15	2	0	ppb	N	Corrosion of household plumbing systems;

	2020							Erosion of natural deposits.

Regulated Contaminants

Contaminant Group: Disinfectants and Disinfection By-Products

Regulated Contaminants	Collection Year	Highest Level Detected	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2022	0.30	.2 - .37	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2022	0	.26 - .26	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2022	1	1.4 - 1.4	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Contaminant Group: Radioactive Contaminants

Regulated Contaminants	Collection Year	Highest Level Detected	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2017	1.80	1.8 - 1.8	0	5	pCi/L	N	Erosion of natural deposits.

Secondary Contaminants

Secondary Contaminant	Collection Year	Highest Level Detected	Range of Levels	SMCL	Units	Likely Source of Contamination and or Reason for Monitoring
MANGANESE	2022	694	402 - 694	50	ppb	Natural sources as well as discharges from industrial uses

Water may naturally have manganese and, when concentrations are greater than 50 ppb, the water may be discolored and taste bad. Over a lifetime, the EPA recommends that people drink water with manganese levels less than 300 ppb and over the short term, EPA recommends that people limit their consumption of water with levels over 1000 ppb, primarily due to concerns about possible neurological effects. Children younger than one year old should not be given water with manganese concentrations over 300 ppb, nor should formula for infants be made with that water for more than a total of 10 days throughout the year.

Violations

Violation for 1,1,1-Trichloroethane

Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.

Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

The violation was returned to compliance once the analytical result was received by the State of Montana DEQ.

Violation for 1,1,2-Trichloroethane

Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.

Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
The violation was returned to compliance once the analytical result was received by the State of Montana DEQ.			
Violation for 1,1-Dichloroethylene			
Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.			
Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
The violation was returned to compliance once the analytical result was received by the State of Montana DEQ.			
Violation for 1,2,4-Trichlorobenzene			
Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.			
Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
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Violation for 1,2-Dichloroethane			
Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.			
Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
The violation was returned to compliance once the analytical result was received by the State of Montana DEQ.			
Violation for 1,2-Dichloropropane			
Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.			
Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
The violation was returned to compliance once the analytical result was received by the State of Montana DEQ.			
Violation for Benzene			
Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.			
Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
The violation was returned to compliance once the analytical result was received by the State of Montana DEQ.			

Violation for Carbon Tetrachloride

Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

The violation was returned to compliance once the analytical result was received by the State of Montana DEQ.

Violation for Chlorobenzene

Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.

Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

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Violation for cis-1,2-Dichloroethylene

Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.

Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

The violation was returned to compliance once the analytical result was received by the State of Montana DEQ.

Violation for Dichloromethane

Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.

Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

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Violation for Ethylbenzene

Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.

Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

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Violation for 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 childrens teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of teeth, and occurs only in developing teeth before they erupt from the gums.

Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
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Violation for o-Dichlorobenzene

Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.

Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
The violation was returned to compliance once the analytical result was received by the State of Montana DEQ.			

Violation for p-Dichlorobenzene

Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.

Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
The violation was returned to compliance once the analytical result was received by the State of Montana DEQ.			

Violation for Styrene

Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.

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MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
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Violation for Tetrachloroethylene

Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.

Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
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Violation for Toluene

Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.

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MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
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Violation for trans-1,2-Dicholoroethylene

Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.

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MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

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Violation for Trichloroethylene

Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

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MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

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Violation for Vinyl Chloride

Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.

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MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

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Violation for Xylenes

Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.

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MONITORING, ROUTINE MAJOR	01/01/2020 to 12/31/2022	03-08-2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

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