

2023 Annual Consumer Report

Quality of Tap Water



SOUTH MILWAUKEE WATER UTILITY'S DRINKING WATER MEETS OR SURPASSES ALL FEDERAL AND STATE DRINKING WATER STANDARDS

This is an annual report on the quality of water delivered by South Milwaukee Water Utility. It meets the federal Safe Drinking Water Act (SDWA) requirement for "Consumer Confidence Reports" and contains information on the source of our water, its constituents, and the health risks associated with any contaminants. Safe water is vital to our community.

Providing this annual water quality report to our customers is an important part of our ongoing water quality efforts. If you have any questions about the Utility or this report, please call the Utility office at (414) 768-8070 or visit our web site at: www.smwi.org. Regular monthly meetings of the Water/Wastewater Commission also provide opportunities for public participation and additional information. These meetings are scheduled on the second Monday of the month at 6:00 pm at the Water Utility (100 Marshall Ave).

Ben Huffman, Superintendent
South Milwaukee Water Utility

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

Dlaim ntawv tshaabzu nuav muaj lug tseemceeb heev nyob rua huv kws has txug cov dlej mej haus. Kuas ib tug paab txhais rua koj, los nrug ib tug kws paub lug thaam.



To obtain a summary of the source water assessment please contact, Ben Huffman at 414-768-8070.

Treatment process

South Milwaukee Water Utility uses an ultra-filtration pressurized membrane system. The membrane technology provides a verifiable barrier against viruses, turbidity, suspended solids, and pathogen contamination such as cryptosporidium for the City's drinking water supply.

Educational 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 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, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

Health Information

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).

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 microbial contaminants are available from the Environmental Protection Agency's safe drinking water hotline (800-426-4791).

Source Water

Source ID	Source	Depth (in feet)	Waterbody Name	Status
1	Surface Water	30	Lake Michigan	Active

Additional Health Information: Concerning Lead in our Water The Utility is required to periodically test the drinking water in homes at 30 predetermined sites in the distribution system for lead and copper, which enters the drinking water by corrosion of home plumbing. For the last test year, 2023, and since the introduction of polyphosphates in 1994, the water supply complies with the lead and copper action levels. 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. South Milwaukee Waterworks 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 (800-426-4791)** or at www.epa.gov/safewater/lead.

Other Compliance: Turbidity Monitoring

In accordance with s. NR 810.29, Wisconsin Administrative Code, the treated surface water is monitored for turbidity to confirm that the filtered water is less than 0.1 NTU/0.3NTU. Turbidity is a measure of the cloudiness of water. We monitor for it because it is a good indicator of the effectiveness of our filtration system. During the year, the highest single-entry point turbidity measurement was 0.04 NTU.

Definition of Terms

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

HA and HAL: HA: Health Advisory. An estimate of acceptable drinking water levels for a chemical substance based on health effects information. HAL: Health Advisory Level is a concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice. Health Advisories are determined by US EPA.

HI: Hazard Index: A Hazard Index is used to assess the potential health impacts associated with mixtures of contaminants. Hazard Index guidance for a class of contaminants or mixture of contaminants may be determined by the US EPA or Wisconsin Department of Health Services. If a Health Index is exceeded a system may be required to post a public notice.

Level 1 Assessment: 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 very detailed study of the water system to identify potential problems and determine, if possible, why an E. coli MCL violation has occurred or why total coliform bacteria have been found in our water system, or both, on multiple occasions.

MCL: Maximum Contaminant Level: 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.

MCLG: Maximum Contaminant Level Goal: 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.

MFL: Million fibers per liter

MRDL: Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for 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.

mrem/year: Millirems per year: (a measure of radiation absorbed by the body)

NTU: Nephelometric Turbidity Units

pCi/l: Picocuries per liter (a measure of radioactivity)

ppm: Parts per million, or milligrams per liter (mg/l)

ppb: Parts per billion, or micrograms per liter (ug/l)

ppt: Parts per trillion, or nanograms per liter

ppq: Parts per quadrillion, or picograms per liter

PHGS: Public Health Groundwater Standards are found in NR 140 Groundwater Quality. The concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice.

RPHGS: Recommended Public Health Groundwater Standards: Groundwater standards proposed by the Wisconsin Department of Health Services. The concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice.

SMCL: Secondary Maximum Contaminant Levels: Secondary drinking water standards for contaminants that affect taste, odor, or appearance of the drinking water. The SMCLs do not represent health standards.

TCR: Total Coliform Rule

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

Contaminants with a Public Health Groundwater Standard, Health Advisory Level, or a Secondary Maximum Contaminant Level The following table lists contaminants which were detected in your water and that have either a Public Health Groundwater Standard (PHGS), Health Advisory Level (HAL), or a Secondary Maximum Contaminant Level (SMCL), or both. There are no violations for detections of contaminants that exceed Health Advisory Levels, Public Health Groundwater Standards or Secondary Maximum Contaminant Levels. Secondary Maximum Contaminant Levels are levels that do not present health concerns but may pose aesthetic problems such as objectionable taste, odor, or color. Public Health Groundwater Standards and Health Advisory Levels are levels at which concentrations of the contaminant present a health risk.

Contaminant (units)	SMCL (ppm)	PHGS or HAL	Level Found	Range	Sample Date (if prior to 2023)	Violation	Typical Source of Contaminant
Sulphate (ppm)	250	n/a	21.0	21.0		No	Runoff/leaching from natural deposits, industrial wastes

Detected Contaminants: Your water was tested for many contaminants last year. We are allowed to monitor for some contaminants less frequently than once a year. The following tables list only those contaminants which were detected in your water. If a contaminant was detected last year, it will appear in the following tables without a sample date. If the contaminant was not monitored last year, but was detected within the last 5 years, it will appear in the tables below along with the sample date.

NOTE: Not listed are other compounds for which the water was tested but undetected. This information is available upon request at the Utility office. South Milwaukee Water Utility did not test for radon in 2022. South Milwaukee Water Utility did not test for cryptosporidium in 2022.

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2023)	Violation	Typical Source of Contaminant
Disinfection Byproducts								
HAA5 (ppb)	304	60	60	22	16 – 28		No	By-product of drinking water chlorination
TTHM (ppb)	304	80	0	45.6	27.0 – 60.7		No	By-product of drinking water chlorination
HAA5 (ppb)	307	60	60	29	17 – 41		No	By-product of drinking water chlorination
TTHM (ppb)	307	80	0	48.8	28.9 – 65.5		No	By-product of drinking water chlorination
HAA5 (ppb)	402	60	60	21	16 – 27		No	By-product of drinking water chlorination
TTHM (ppb)	402	80	0	40.7	25.3 – 61.0		No	By-product of drinking water chlorination
HAA5 (ppb)	407	60	60	25	16 – 28		No	By-product of drinking water chlorination
TTHM (ppb)	407	80	0	49.2	28.2 – 68.9		No	By-product of drinking water chlorination
Inorganic Contaminants								
ARSENIC	10	n/a		0.68	0.68	3/1/2021	No	Erosion of natural deposits; Runoff from orchards; Runoff
BARIUM (ppm)	2	2		0.023	0.023		No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
COPPER (ppm)	AL=1.3	1.3		0.180	0 of 36 + action level		No	Corrosion of household plumbing; Erosion of natural deposits; Leaching from wood preservatives
FLUORIDE (ppm)	4	4		0.4	0.4		No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
LEAD (ppb)	AL=15	0		7.70	0 of 36 + action level		No	Corrosion of household plumbing systems; Erosion of natural deposits
NICKEL (ppb)	100			0.63	0.63	3/1/2021	No	Nickel occurs naturally in soils, ground water and surface waters, and is often used in electroplating stainless steel and alloy products
SODIUM (ppm)	n/a	n/a		11.0	11.0		No	n/a
NITRATE (NO3-N) (ppm)	10	10		0.36	0.36		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Synthetic Organic Contaminants								
Atrazine (ppb)	3	3		0.032		4/19/2023	No	Runoff from herbicide used on crops
Hexachlorocyclopentadiene (ppb)	50	50		0.0		4/13/2020	No	Discharge from chemical factories
Radioactive Contaminants								
COMBINED URANIUM (ppb)	30	0		0.8	0.8	4/13/2020	No	Erosion of natural deposits
GROSS Alpha, Excl. R&U (pCi/l)	15	0		1.0	1.0	4/13/2020	No	Erosion of natural deposits
Unregulated Contaminants: Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. EPA required us to participate in this monitoring.								
Metolachlor (Dual) (ppm)	n/a	n/a		0.0084	0.01 – 0.02	4/19/2023		
Bromochloroacetic acid (ppm)	n/a	n/a		4.0	3.4 – 4.5	2/19/2019		
Bromodichloroacetic acid (ppm)	n/a	n/a		5.9	5.3 – 6.4	2/19/2019		
Chlorodibromoacetic acid (ppm)	n/a	n/a		1.42	1.3 – 1.5	2/19/2019		
Monobromoacetic acid (ppm)	n/a	n/a		0.41	0.48 – 0.65	2/19/2019		
Dibromoacetic acid (ppm)	n/a	n/a		0.81	0.66 – 0.88	2/19/2019		
Dichloroacetic acid (ppm)	n/a	n/a		8.45	7.2 – 9.6	2/19/2019		
Bromochloroacetic acid (ppm)	n/a	n/a		7.43	6.6 – 8.3	2/19/2019		
Aldrin (ppb)	n/a	n/a		0.012	0.00-0.01	4/19/2023		

PFAS Contaminants with a Recommended Health Advisory Level

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are a large group of human-made chemicals that have been used in industry and consumer products worldwide since the 1950. The following table list PFAS contaminants which were detected in your water and that have a Recommended Public Health Groundwater Standard (RPHGS) or Health Advisory Level (HAL). There are no violations for detections of contaminants that exceed the RPHGS or HAL. The RPHGS are levels at which concentrations of the contaminant present a health risk and are based on guidance provided by the Wisconsin Department of Health Services.

Typical Source of Contaminant Drinking water is one way that people can be exposed to PFAS. In Wisconsin, two-thirds of people use groundwater as their drinking water source. PFAS can get in groundwater from places that make or use PFAS and release from consumer products in landfills.

Contaminant (units)	Site	RPHGS or HAL (PPT)	Level Found	Range	Sample Date (if prior to 2023)
PFBS (ppt)		450000	0.43	0.39 - 0.46	
PFHXS (ppt)		40	0.94	0.87 - 1.00	
PFHXA (ppt)		150000	1.65	1.40 - 1.90	
PFOS (ppt)		20	2.15	2.00 - 2.30	
PFOA (ppt)		20	2.10	1.80 - 2.40	
PFOA AND PFOS TOTAL (ppt)		20	4.25	4.10 - 4.40	

The EPA announced the final National Primary Drinking Water Regulation for six PFAS contaminants on April 10th, 2024. The South Milwaukee Water Utilities drinking water has tested below the new EPA MCL. For more information, please visit the EPA's PFAS website. <https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>

Monitoring Violation

Description	Contaminant Group	Sample Location	Compliance Period Beginning	Compliance Period Ending
Fail to collect Routine Samples – RTCR	Microbiological Contaminants	Distribution System	6/1/2023	6/30/2023

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the compliance period noted in the above table, we did not complete all monitoring or testing for the contaminant(s) noted, and therefore cannot be sure of the quality of your drinking water during that time.

Action taken

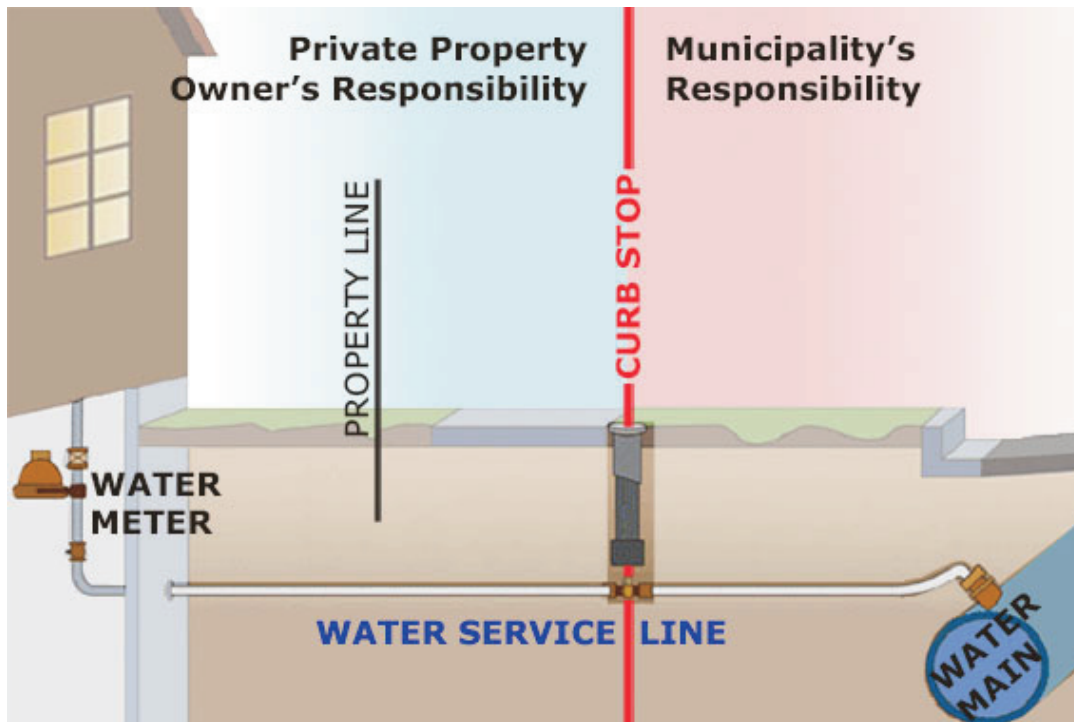
The missing samples were collected on June, 22, 2023. The samples were analyzed, but the results were not uploaded to the DNR as required.

Lead Service Line Replacements

The South Milwaukee Water Utility has begun the replacement of the approximately 1,700 lead service lines. In 2024, between 250 and 300 are slated to be replaced with the \$2.2 million dollars the Utility received from the Wisconsin Department of Natural Resources. In October of 2023, the Utility submitted an Intent to Apply for State of Wisconsin Safe Drinking Water Loan Program for Lead Service Line Replacements for State Fiscal Year 2025 for approximately \$7 million dollars. We anticipate the funding list for 2025 to be made available by the end of October 2024. At that time, we will learn the amount of grant funding available for private side service line replacement costs for 2025. Please contact the South Milwaukee Water Utility if you have questions regarding lead service line replacements.

Lead Service Line Funding

Funding for private lead service line replacements is determined by the Wisconsin Department of Natural Resources on an annual basis. The amount of grant funding can vary by census tract. The City of South Milwaukee has seven (7) different census tracts. Any private side lead service line replacement costs that are not covered by a grant is eligible for a 10-year special charge at an interest rate of 0.25% that will be added to the property tax bill.



South Milwaukee Water Utility Transmission Line Replacement Project

In 2025, the South Milwaukee Water Utility is planning on replacing the 20" water transmission line that runs from the Water Utility to 11th and Michigan. This section of piping has failed six times in the past eleven years. There will be additional work on a water main relay on this section of Michigan Avenue, as well as, lead service line replacements and sanitary sewer work.

Financial Assistance Programs

Customers having difficulty paying their water/sewer bills may be eligible for assistance through the following state programs:

WI Help for Homeowners: 1-855-246-6394

Low Income Household Water Assistance Program: 1-833-426-9472

For links to these programs' websites and for other useful information, visit the Water Utility's department page on the city's website: www.smmwi.org