CITY OF SIOUX FALLS 2022 WATER QUALITY **DATA**

INORGANIC CHEMICALS

PARAMETER (UNIT)	MCLG	MCL	LEVEL FOUND	RANGE	POSSIBLE SOURCE
Arsenic (PPM)	0	0.010	0.0006		Erosion of natural deposits, orchards, glass, and electronics production wastes.
Barium (PPM)	2	2	0.019		Erosion of natural deposits.
Chromium (PPM)	0.100	0.100	0.01		Erosion of natural deposits.
Fluoride (PPM)	< 4	4	0.57	0.16–0.72	Additive to promote strong teeth.
Nitrate (PPM)	10	10	0.74		Runoff from fertilizer use; erosion of natural deposits.

LEAD AND COPPER (SAMPLES COLLECTED IN 2021)

PARAMETER (UNIT)	MCLG	ACTION LEVEL	90% OF VALUES LESS THAN	NO. OF SITES ABOVE AL	POSSIBLE SOURCE OF SUBSTANCE
Lead (PPB)	0	15	<1	0 out of 50	Corrosion of household plumbing systems.
Copper (PPM)	1.3	1.3	0.06	0 out of 50	Corrosion of household plumbing systems.

DISINFECTANTS/DISINFECTION BY-PRODUCTS

PARAMETER (UNIT)	MRDLG	MCL	LEVEL FOUND	RANGE	POSSIBLE SOURCE OF SUBSTANCE
Total Chlorine (PPM)	4	4.0	2.84	2.60–3.07	Water additive used to control microbes.
TTHMs (Total Trihalomethanes) (PPB)	N/A	80	36.27	30–42.53	By-product of drinking water chlorination.
HAA (Haloacetic Acids) (PPB)	N/A	60	11	9–13	By-product of drinking water chlorination.

MICROBIOLOGICAL

PARAMETER (UNIT)	MCLG	MCL	MAXIMUM LEVEL FOUND	POSSIBLE SOURCE OF SUBSTANCE
Total Coliform Bacteria (present/absence)	Present in no samples	5% or more of samples per month are positive	Present in 0.8% of samples in one month	Naturally present in the environment.
Turbidity (NTU)	N/A	Determined by treatment technology	100% of samples were within limits. Highest = 0.14	Soil runoff.

ORGANIC CARBON

PARAMETER (UNIT)	MCLG	MCL	REMOVAL RATIO	RANGE	POSSIBLE SOURCE OF SUBSTANCE
Total Organic Carbon (PPM)	N/A	TT	1.73	1.27–2.32	Naturally present in the environment.

RADIOLOGICAL

PARAMETER (UNIT)	MCLG	MCL	LEVEL FOUND	YEAR SAMPLED	POSSIBLE SOURCE OF SUBSTANCE
Beta/Photon Emitters (pCi/L)	0	50	4.7	2022	Decay of natural and man-made deposits.

UNREGULATED CHEMICALS

PARAMETER (UNIT)	MCLG	MCL	LEVEL FOUND	YEAR SAMPLED	POSSIBLE SOURCE OF SUBSTANCE
Chloroform (PPB)	Unregulated		10.3	2022	By-product of drinking water chlorination.
Bromodichloromethane (PPB)	Unregulated		11.8	2022	By-product of drinking water chlorination.
Dibromochloromethane (PPB)	Unregulated		10.4	2022	By-product of drinking water chlorination.
Bromoform (PPB)	Unregulated		1.73	2022	By-product of drinking water chlorination.

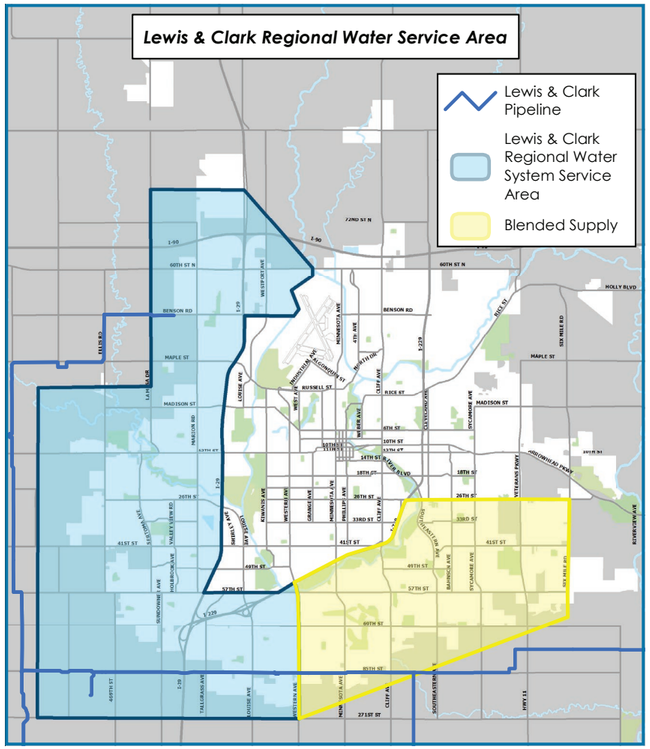
LEWIS & CLARK REGIONAL WATER SYSTEM WATER QUALITY DATA

PARAMETER (UNIT)	MCLG	MCL	LEVEL FOUND	RANGE	POSSIBLE SOURCE OF SUBSTANCE
Fluoride (PPM)	4	4	0.56	0.16–0.72	Additive to promote strong teeth.
Nitrate (PPM)	10	10	0.40		Runoff from fertilizer, leaching from septic tanks, sewage, and naturally present in the environment.

Additional water quality data from the City of Sioux Falls and the Lewis & Clark system may be found on the City's website at www.siouxfalls.org/water.

No health-based drinking water quality violations were recorded in

PW23_047



FINDING YOUR WATER **QUALITY**

This water quality report provides information for all water customers whose drinking water is provided by the Sioux Falls Water Division. Our water comes from two different sources: 1) the water plant owned and operated by the City and 2) water purchased from the Lewis and Clark Regional Water System. You can use the map shown above to determine where your water comes from and what water quality data applies to your drinking water.

LEAD IN DRINKING **WATER**

Sioux Falls Water Division has been testing for lead and copper in accordance with the EPA's Lead and Copper Rule since 1992 and has consistently tested below the Action Level established in the rule.

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. The Sioux Falls Water Division utilizes pH adjustment of the treated water to minimize lead and copper levels. This process has shown to be effective by the continued low lead and copper levels at customers faucets we sample. **It is still advised that 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. You may call the Water Quality Concern Line at 605-373-6950 to request a lead-in-water sampling kit. In addition, information on lead in drinking water, testing methods, and steps you take to minimize exposure is available from the Safe Drinking Water Hotline: 1-800-426-4791 or at www.epa.gov/safewater/lead.

OUR **RESULTS**

Providing an average of 23.54 million gallons of water a day for use in homes, schools, hospitals, and businesses that meets all required water quality standards is the accomplishment of our expertly trained lab analysts and state-certified water treatment operators. Our commitment to exceptional water quality is reflected in the number of tests we perform during and after the treatment process. More than 170,000 analyses on more than 250 substances were conducted during 2022 to ensure reliable results and safe drinking water. This number far exceeds the minimum testing requirements. 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. Even the highest levels detected were well below the required limits. We listed in this report only the substances that were detected.

USEFUL DRINKING WATER TERMS & DEFINITIONS

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

BDL (Below Detection Level): The substance could not be found at the minimum amount that can be reliably detected.

GPG (Grains Per Gallon): Unit of water hardness.

MCL (Maximum Contaminant Level): The highest amount of a substance 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 substance below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

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 contamination.

NA (Not Applicable): Data not available.

NTU (Nephelometric Turbidity Units): Cloudiness of the water.

pCi/L (Picocuries per Liter): A measure of radioactivity.

PPM (Parts Per Million): Also referred to as milligrams per liter.

PPB (Parts Per Billion): Also referred to as micrograms per liter.

PPT (Parts Per Trillion): Also referred to as nanograms per liter.

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

ADDITIONAL PARAMETERS OF **INTEREST**

PARAMETER (UNITS)	SIOUX FALLS AVERAGE	LEWIS & CLARK AVERAGE
Alkalinity (PPM)	59	81
Chlorate (PPB)	<10	147
Chloride (PPM)	35	15
Hardness: Calcium Hardness (as $CaCO_3$) (PPM)	129	96
Magnesium Hardness (as $CaCo_3$) (PPM)	115	80
Total Hardness (as $CaCO_3$) (PPM)	244	176
Water Softener Setting, total hardness (GPG)	14	10
Iron (PPM)	0.04	0.04
Manganese (PPM)	<0.05	<0.01
Perfluoroalkyl Substances (PFAS) (PPT)	<2	<2
pH (units)	8.4	8.6
Sodium (PPM)	26	84
Sulfate (PPM)	187	238

CITY OF SIOUX FALLS PUBLIC WORKS

POSTAL CUSTOMER

**********ECRWSSEDDM

ECRWSS

PRSRT STD
U.S. Postage
PAID
Permit No. 1148
Sioux Falls, SD

Water Purification Plant
2100 North Minnesota Avenue
P.O. Box 7402
Sioux Falls, SD 57117-7402

2022 WATER QUALITY REPORT

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

CITY OF SIOUX FALLS

PROTECTING WATER AT THE SOURCE

The City utilizes the Big Sioux River, the Big Sioux Aquifer, and the Middle Skunk Creek Aquifer to provide water for its residents. In late 2003, the South Dakota Department of Agriculture and Natural Resources (SDDANR) completed a source water assessment to determine the potential for contamination in and around these sources. The 1996 Amendments to the Safe Drinking Water Act required SDDANR to complete a report of this type for each public water supply in the state. Based on the findings of this report, the sources that the City of Sioux Falls utilizes for its drinking water are moderately susceptible to contamination. The City continually monitors its water sources for contamination and has a long history of providing safe drinking water to our customers. You may view a copy of the report at the office of the SDDANR in Pierre.

COMPREHENSIVE WATER QUALITY MONITORING

The City of Sioux Falls receives its drinking water from the Big Sioux River (surface water), the Big Sioux Aquifer, the Middle Skunk Creek Aquifer (ground water), and treated water from the Lewis and Clark Regional Water System. All drinking water sources (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. All of these sources contain some naturally occurring substances. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material. It can also pick up substances resulting from the presence of people and animals. Water from the river, wells, treatment plant, and taps throughout Sioux Falls is tested regularly to screen for these substances so steps can be taken before harmful levels occur. Samples are tested at the water plant lab, the city and state health lab, and several contract labs specializing in drinking water analysis. Substances that may be present are divided into five basic testing groups and include:

Microbial contaminants (such as viruses and bacteria) may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants (such as salts and metals) may occur naturally or result from urban storm water runoff, sewage treatment plant discharges, oil and gas production, mining, or farming

Pesticides and herbicides may come from urban storm water runoff, residential uses, and agriculture.

Organic chemical contaminants (including synthetic and volatile organic chemicals) may be by-products of industrial and petroleum production, urban storm water runoff, gas stations, and septic systems.

Radioactive contaminants may be naturally occurring or the result of oil and gas production and mining activities.

The City of Sioux Falls tests for more than 100 regulated and many other nonregulated contaminants in the drinking water. Only those regulated contaminants that are detected are listed on this report.

PERFLUOROALKYL SUBSTANCES (PFAS)

In 2013, the City of Sioux Falls began testing its drinking water for a group of chemicals called perfluoroalkyl substances (PFAS). These chemicals were widely used in manufacturing cookware, food packaging, clothing, carpeting, personal care products, firefighting foams, and other applications. Once introduced into the environment, PFAS remain in the environment for a long time without breaking down and may be linked to adverse human health effects.

In 2016, the Environmental Protection Agency (EPA) issued a health advisory level the combined amount of two PFAS compounds; perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). In July of that year, the City detected PFAS chemicals in the treated drinking water. All levels were well below the EPA health advisory level. The City proactively tested individual source water wells and discontinued the use of any well where PFAS were detected. The City continues to yearly test all remaining wells used as a source of drinking water to ensure PFAS are not present.

Additionally, treated water and water purchased from the Lewis and Clark Regional Water System are monitored for PFAS monthly. All samples have been PFAS-free and the water remains safe to consume.

EPA announced new Health Advisory Limits for PFAS chemicals in June of 2022 and has issued a proposal to regulate PFAS in drinking water in the coming years. The City, along with the South Dakota Department of Environment and Natural Resources, continue to monitor the information supplied by EPA and their partners.

Additional information and answers to a number of questions about PFAS are available at **www.siouxfalls.org/water**

QUESTIONS?

If you have any questions about your water, please contact us for answers at

605-373-6950

DRINKING WATER AND YOUR HEALTH

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration establishes limits for contaminants in bottled water. Levels of regulated substances are enforced through Maximum Contaminant Levels (MCLs).

- **Primary Drinking Water Standards** set limits for substances in water that may be harmful to humans if consumed in excess. They include MCLs for contaminants that affect health, monitoring and reporting requirements, and water treatment requirements.
- **Secondary Drinking Water Standards** deal with aesthetic qualities, such as taste and odor, that relate to consumer acceptance rather than health factors.

According to the EPA, 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 EPA's Safe Drinking Water Hotline at 800-426-4791.

WHAT IF I HAVE SPECIAL HEALTH NEEDS?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer undergoing chemotherapy, people 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/Centers for Disease Control guidelines for appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

LOOKING TO THE FUTURE

The City of Sioux Falls will begin construction on a new water collection well in 2023 which is the second new well construction by the City in recent years. This well is expected to be provide the greatest amount of water and be more drought tolerant of any of the wells that provide water to the Sioux Falls community.