

ATTENTION HAZEN RESIDENTS
ANNUAL DRINKING WATER QUALITY REPORT

The following is Hazen's 2024 Annual Drinking Water Quality Report, also called the Consumer Confidence Report or CCR. The EPA and ND Department of Environmental Quality requires each water supplier to prepare and make available to the public an annual CCR.

The report will not be mailed to water customers, but rather the report is being published in its entirety below. Copies of the CCR are available upon request by stopping in city hall, calling 748-2550 or can be accessed on the city website: www.hazennd.org.

2024 ANNUAL DRINKING WATER QUALITY REPORT Hazen, North Dakota

We are pleased to present the Annual Drinking Water Quality Report. This report is designed to inform you about the safe clean water we deliver to you daily. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of water. On May 21, 2012, we began receiving water from the Southwest Water Authority.

The Oliver Mercer North Dunn (OMND) Water Treatment Plants (WTP) source is surface water obtained from the Missouri River at Renner Bay, about seven miles northeast of the treatment plant on Lake Sakakawea. The quality and condition of this water varies with lake level, spring runoff and other factors. SWA monitors regularly for offensive tastes and odors in the raw water and reduces the taste and odor issues through the addition of ozone. From the Intake, the raw water is pumped to two raw water storage tanks, which are located at the OMND WTP site. The raw water from the tanks enters the treatment plant and runs through the pretreatment filter screens. This helps to reduce any suspended solids or debris from entering the ultrafiltration (UF) modules. The UF process primarily filters out any viruses and bacteria that may be present in the water by maintaining a 4-log removal. The water coming off the UF process is piped to the buffer basin. A portion of the filtrate water from the buffer basin goes through the reverse osmosis (RO) process, which primarily filters out any inorganics that may be present in the water. The permeation coming off the RO process is then blended at a 50/50 or 60/40 ratio with UF water within the contract basin. At this point ozone is added for taste and odor control as well as chloramines to reduce bacteria to a safe level and provide a residual that protects against contamination. Caustic soda is added for a pH adjuster, and fluoride is provided for dental health. After proper detention time and mixing, the water is then pumped through the distribution system to all our customers, including you.

As part of a nationwide program, the North Dakota Department of Environmental Quality completed an assessment of the OMND's source water and determined that our water system is moderately susceptible to potential contaminant sources. They also noted that "historically, Southwest Water Authority has effectively treated this source water to meet drinking water standards." Information about the Source Water Assessment is available by calling 701-225-9149 or 1-800-425-0241 or email at swa@swwater.com.

"I'm pleased to report that our drinking water is safe and meets federal and state requirements" said Jarid Dauenhauer, Water/Waste Water Superintendent for the City of Hazen. If you have any questions about this report or your water utility, please contact Jarid Dauenhauer at 1-701-748-6519. We want our residents and customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held at 5:30 p.m. the first and third Mondays of each month at Hazen City Hall. If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call Jarid at the number listed above.

The City of Hazen would appreciate it if large volume water customers would please post copies of this *Annual Drinking Water Quality Report* in conspicuous locations and/or distribute the report to tenants, residents, patients, students, and/or employees, so individuals who consume the water, but do not receive a water bill, can learn about our water system.

The City of Hazen routinely monitors contaminants in your drinking water according to Federal and State laws. The tables on page 2-3-4 show the results of our monitoring for the period of January 1 to December 31, 2024. As authorized and approved by the EPA, the state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentration of these contaminants is not expected to vary significantly from year to year. Some of our data (e.g., for inorganic contaminants), though representative, is more than one year old.

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 effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap 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, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban storm water, industrial or domestic wastewater discharges, oil & gas production, mining, or farming.

Pesticides and herbicides, which come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses. (Pesticide: Generally, any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest. Herbicide: Any chemical(s) used to control undesirable vegetation.)

Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water 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, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

TEST RESULTS FOR THE CITY OF HAZEN

Inorganic Contaminants

Contaminant	MCLG	MCL	Level Detected	Units of Measurement	Range	Date	Violation Yes/No Other Info	Likely Source of Contamination
Arsenic	0	10	1.01	ppb	N/A	2019	No	Erosion from natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2	2	0.0198	ppm	N/A	2016	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Copper (10 samples taken)	1.3	AL=1.3	0.196	ppm	0.0137 - 0.214	2024	No sites exceeded the action level	Corrosion of household plumbing systems; Erosion of natural deposits.
Fluoride	4	4	0.77	ppm	N/A	2016	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead (10 samples taken)	0	AL=15	4.1	ppb	4.36	2024	No sites exceeded the action level	Corrosion of household plumbing systems; Erosion of natural deposits.
Nitrate-Nitrite	10	10	0.031	ppm	N/A	2024	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Microbial Contaminants

Turbidity**	N/A	TT = 0.15	0.08	N/A	2024	100% of samples met turbidity limit.	Soil runoff
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Surface Water Treatment Rate Monitoring Data: Lowest Monthly Percentage of Samples Meeting Turbidity Limits=100

Highest Single Measurement= 0.08 ** Turbidity is a measure of the cloudiness of the water. The SWWA monitors it because it is a good indicator of the effectiveness of their filtration system. 100% of samples met turbidity limits.

Disinfectants

Contaminant	MRDLG	MRDL	Level	Unit Measurement	Range	Date (year)	Violation Yes/No Other Info	Major Sources in Drinking Water
Chloramines	4	4	2.7	ppm	1.7–3.4	2024	No	Water additive used to control microbes

Radioactive Contaminants

Contaminant	MCLG	MCL	Level Detected	Unit Measurement	Range	Date	Violation Yes/No Other Info	Likely Source of Contamination
Radium, Combined	0	5	0.691	pCi/L	N/A	2018	No	The likely source of Radium is erosion of natural deposits.
Uranium, Combined	0	30	ND	ppb	N/A	2018	No	The likely source of Uranium is erosion of natural deposits.
Gross Alpha, Including RA, Excluding RN & U	15	15	ND	pCi/L	NA	2018	No	The likely source of Gross Alpha is erosion of natural deposits.

Stage 2 Disinfection By-Products (TTHM/HAA5)

Contaminant	MCL	High Comp.	Unit Measurement	Range	Date	Violation Yes/No Other Info	Likely Source of Contamination
HAA5	60	6.00	ppb	N/A	2024	No	By-product of drinking water chlorination
TTHM	80	16	ppb	N/A	2024	No	By-product of drinking water chlorination

Unregulated Contaminants

Alkalinity, Carbonate	N/A	N/A	3	ppm	ND - 3	2024	No	N/A
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Bicarbonate as HCO ₃	N/A	N/A	197	ppm	181-197	2024	No	N/A
Alkalinity Carbonate	N/A	N/A	3	ppm	ND – 3	2024	N/A	N/A
Lithium ug/L	N/A	N/A	20	Ppm	17 – 22	2024	N/A	N/A

The EPA requires testing for certain unregulated contaminants but has not established enforceable drinking water standards for them. They are monitored to determine whether, or not, future regulation is warranted. To obtain information about these tests you may contact Ken Knight, Water Treatment Plant operator (701-225-9149) or Estee Avalos SWA CFO/Office Administrator at 1-888-425-0241 or email at swa@swwater.com.

Total Organic Carbon (TOC) Removal

Contaminant (units)	MCL	Levels Detected	Detection Range	Test Date	Exceedance or Violation	Major Sources in Drinking Water
Alkalinity Source Water (ppm)	N/A	164	148-164	2024	N/A	Natural erosion, plant activities, and certain industrial waste discharges
Total Organic Carbon Source Water (ppm)	TT	4.63	2.97-4.63	2024	N/A	Naturally present in the environment
Total Organic Carbon Finished Water (ppm)	TT	2.85	1.30-2.85	2023	N/A	Naturally present in the environment

Definitions of Terms Used in the Previous Tables:

Not Applicable (N/A)

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 is \$10,000.

Parts per billion (ppb) or Micrograms per liter(µg/l): one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/l): picocuries per liter is a measure of the radioactivity in water.

Action Level (AL): the concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which 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. MCL’s 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.

Maximum Residual Disinfectant Level Goal: (MRDLG) The level of 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.

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

The EPA requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the tables above are the only contaminants detected in your drinking water.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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.

There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of people who are exposed to lead before or during pregnancy may be at increased risk of these harmful effects. Adults have increased risk of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your risks.

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The City of Hazen is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home.

Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by the American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly.

Use only cold water for drinking, cooking and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact the City of Hazen, 701-748-2550 or 701-748-6519. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>

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 water containing 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.

The water we provide is treated with fluoride addition as part of the water treatment process to enhance dental health. For information regarding the level of fluoride in the finished water provided to our consumers, please contact our supplier, Southwest Water Authority.

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as a person 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 and Prevention (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 (1-800-426-4791).

Our public water system, in cooperation with the North Dakota Department of Health, has completed the delineation and contaminant/land use inventory elements of the North Dakota Source Water Protection Program. Based on the

information from these elements, the North Dakota of Health has determined that our source water is moderately susceptible to potential contaminants.

In our continuing efforts to maintain a safe and dependable water supply that will benefit all our customers, it may be necessary to make improvements in your water system. These improvements sometimes require rate structure adjustments.

This report is a yearly update on the quality of water that your city's water system provides. The City of Hazen works diligently to provide top quality water to every tap. We ask that all our customers help us protect our water resources, which are the heart of our community, our way of life, and our children's future. Please call our office if you have questions about our city's water system.

USEPA has recently published the Lead and Copper Rule Revision. The purpose of this revision is to strengthen public health protections by removing lead service lines within public water systems. One requirement of this rule revision was to inventory all drinking water service lines within our public water system and notify consumers which type of line serves each property. You may have recently received a letter from our system with this information.

The inventory is a listing of all service lines and the material composition of each line. The types of lines being documented are Lead lines, Galvanized Requiring Replacement (GRR) and lines made of Unknown Material. Classification of a service line as being comprised of Unknown Service Line material indicates that our system cannot currently confirm the material of both the public and private portions of the line with written records. Non-lead lines were also documented; however, we were not required to notify consumers with documented nonlead lines. The classification of the type of service line serving a residence was based on historical data regarding the property and in some cases verification of the type of material on the privately owned side of the line by visual inspection or replacement records of the owner.

The current Service Line Inventory for our system has been completed and is available for viewing at our office OR is available online at www.hazennd.gov. Please contact City of Hazen at 701-748-2550 or 701-748-6519 should you have any questions.

Additional work to update the service line inventory, including inspection of the line, may need to be performed to further document and confirm the type of material making up both the public and private portions of the line serving your home or business. We will need the help of home/building owners to access the service line on the private side of the service line to positively identify the material of the line that carries water within your home/building. Our system may perform this work with our own system employees, or we may contract engineering firms or third-party contractors to complete this work to improve our service line inventory.