**Annual Drinking Water Quality Report Upper Souris Water District-System I & II 2024**

We are very pleased to provide you with this year's Annual Drinking Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is to provide you with a safe and dependable supply of drinking water. Upper Souris Water District -System I, produced ground water and treated it at their own water treatment plant. Beginning in February, 2023 Upper Souris System I began receiving water from the city of Minot. Minot’s water source is ground water and is treated using lime softening. Chloramines are added for disinfection.

Upper Souris Water District-System I is participating in North Dakota’s Wellhead Protection Program. Copies of the Wellhead Protection Program plan and other relevant information regarding this program can be obtained during normal office hours. The North Dakota Department of Environmental Quality has prepared a Source Water Assessment for the Upper Souris Water District-System I. Information on this program is available at the office.

Our public water system, in cooperation with the North Dakota Department of Environmental Quality, 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 Department of Environmental Quality has determined that our source water is not likely susceptible to potential contaminants. No significant sources of contamination have been identified.

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Kristine Goettle at 701-385-4093. We want our valued 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 on the 3rd Wednesday of every month at 7:00 pm, at Upper Souris’ office. If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call Kristine at the number listed above.

Upper Souris Water District – System I would appreciate it if large volume water customers would please post copies of this Annual Drinking Water Quality Report in conspicuous locations or distribute them 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.

Upper Souris Water District -System I routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2024. As authorized and approved by EPA, the state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data, though representative, is more than one year old.

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, 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 storm water,

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industrial or domestic wastewater discharges, oil 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, which 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.

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In order to ensure that tap water is safe to drink, the 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.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

*Not Applicable (NA) No Detect (ND)*

*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 in $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. MCLs 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 (MRDL)* – 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.

*Maximum Residual Disinfectant Level Goal (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.

*Obsvns*-Field at 100 power.

*IDSE*-Initial distribution System Evaluation

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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 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.

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/Centers for Disease Control and Prevention (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).

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 persons who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks 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 home plumbing. Upper Souris Water District 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 an 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 Upper Souris Water District at 701-385-4093. 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*](https://www.epa.gov/safewater/lead)

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), lines made of Unknown Material, and Non-lead. 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 non-lead 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 Upper Souris Water District office.

Please contact Upper Souris Water District at 701-385-4093 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 and occupants in order 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 with engineering firms or third party contractors to complete this work to improve our service line inventory.

Upper Souris Water District-System I works diligently to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call Kristine at 701-385-4093 if you have questions.

# 2024 TEST RESULTS FOR Upper Souris Water District-System I and Minot

## Lead/Copper

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Contaminant** | **MCLG** | **MCL** | **Level Detected** | **Units** | **Range** | **Date****(year)** | **Violation** | **Likely Source of Contamination** |
| Copper | 1.3 | AL=1.3 | 0.158 | ppm | 0.02 - 0.07 | 2024 | No | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Lead | 0 | AL=15 | 13.5 | ppb | 0.10 - 104.4 | 2024 | No | Corrosion of household plumbing systems; erosion of natural deposits |

## Disinfectants

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Contaminant | MCLG | MCL | Level Detected | Units | Range | Date | Violation | Likely Source of Contamination |
| Chloramine | 4 | 4 | 2.6 | ppm | 2.16 - 2.75 | 2024 | No | Water additive used to control microbes |

## Stage 2 Disinfection By-Products

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Contaminant | MCLG | MCL | Level Detected | Units | Range | Date | Violation | Likely Source of Contamination |
| HAA5 | NA | 60 | 18 | ppb | 6.35 - 22.86 | 2024 | No | By-product of drinking water chlorination |
| TTHM | NA | 80 | 53 | ppb | 33.98 - 52.23 | 2024 | No | By-product of drinking water chlorination |

## Inorganic Contaminants - Minot

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Contaminant | MCLG | MCL | Level Detected | Units | Range | Date | Violation | Likely Source of Contamination |
| Nitrate-Nitrite (as Nitrogen) | 10 | 10 | 0.148 | ppm | NA | 2024 | No | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |

## Unregulated Contaminants

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Contaminant | MCLG | MCL | Level Detected | Units | Range | Date | Violation | Likely Source of Contamination |
| Alkalinity, Carbonate | NA | NA | 11 | ppm | 4 - 11 | 2024 | No | NA |
| Alkalinity, Total | NA | NA | 135 | ppm | 78.2 - 135 | 2024 | No | NA |
| Bicarbonate as HCO3 | NA | NA | 141 | ppm | 81 - 141 | 2024 | No | NA |
| Calcium | NA | NA | 36.1 | ppm | 26.5 - 36.1 | 2024 | No | NA |
| Conductivity @ 25 UMHOS/CM | NA | NA | 1400 | umho/cm | 1290 - 1400 | 2024 | No | NA |
| Orthophosphate | NA | NA | 0.017 | ppm | 0.011 - 0.017 | 2024 | No | NA |
| pH | NA | NA | 8.8 | pH | 8.56 - 8.85 | 2024 | No | NA |
| TDS | NA | NA | 868 | ppm | 800 - 868 | 2024 | No | NA |

**2024 TEST RESULTS FOR Upper Souris Water District-System II and Minot**

**Lead/Copper**

**Contaminant** **MCLG**

Copper 1.3

Lead 0

**Disinfectants Contaminant** **MCLG**

Chloramine 4

**MCL** **Level** **Units** **Range** **Date Detected**

AL=1.3 0.028 ppm 0.02 - 2022 0.07

AL=15 13.5 ppb 0.10 - 2022 104.40

**MCL** **Level** **Units** **Range** **Date Detected**

4 2.7 ppm 2.11 - 2024 2.8

**Violation**

No

No

Violation

No

**Likely Source of Contamination** Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives Corrosion of household plumbing systems; erosion of natural deposits

**Likely Source of Contamination** Water additive used to control microbes

**Stage 2 Disinfection By-Products**

**Contaminant** **MCLG** **MCL**

HAA5 NA 60

TTHM NA 80

**Level** **Units Detected**

7 ppb

43 ppb

**Range** **Date**

NA 2024

NA 2024

**Violation**

No

No

**Likely Source of Contamination** By-product of drinking water chlorination

By-product of drinking water chlorination

**Inorganic Contaminants - Minot**

**Contaminant** **MCLG** **MCL**

Nitrate- 10 10 Nitrite (as

Nitrogen)

**Level** **Units Detected**

0.148 ppm

**Range** **Date**

NA 2024

**Violation**

No

**Likely Source of Contamination** Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits