



# 2023 WATER QUALITY REPORT

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## **LETTER TO CUSTOMER-OWNERS**

Many of us often take for granted the precious resource that flows from our faucets — safe and reliable drinking water.

Metropolitan Utilities District (M.U.D.) is proud to present the 2023 Water Quality Report, which provides an overview of your drinking water from the source to the tap. Your water continues to meet or exceed all state and federal standards for drinking water.

M.U.D. operates and maintains more than 3,100 miles of mains that deliver clean drinking water to more than 227,000 customer accounts in the metro Omaha area, serving a population of nearly 600,000 people. M.U.D. serves an average of 90 million gallons of water per day to the community and maintains more than 27,000 hydrants for fire protection.

We operate three water treatment plants, which provide a reliable water supply and also allow us to take facilities out of service as needed for system maintenance or improvements. Some of our infrastructure dates back to the 1880s and one of the challenges this poses is water main breaks. In 2023, there were 641 water main breaks.

To improve system reliability, M.U.D. began a program in 2008 to replace and update critical infrastructure. Prioritization of water main replacements is based on a sophisticated risk model and asset management plan that considers a variety of factors, including break history, type of pipe and consequence of failure. Customers fund this program through water infrastructure fees on their monthly bill. In 2023, we replaced 18.5 miles of targeted water mains and completed condition assessment on an additional 3.5 miles of water main.

M.U.D. is working diligently to ensure a safe and reliable drinking water supply to our customerowners, as well as safeguarding the water system for future generations.

## **WHY THIS REPORT?**

The Safe Drinking Water Act requires public water supply systems to prepare annual water quality reports for customers to receive accurate, comprehensive information about their water supply.

For more information, call 402.554.6666 or visit mudomaha.com.

# WATER SOURCES & TREATMENT

## SOURCES OF DRINKING WATER

Sources of drinking water (tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and groundwater 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 human activity.

Sources of M.U.D. tap water include the Missouri and Platte Rivers and the Dakota sandstone aquifer. These sources are categorized as surface water (Missouri River), groundwater under-the-direct-influence of surface water (Platte River) and groundwater. Water is pumped from intakes and wells maintained by the District.

# SOURCES WATER ASSESSMENT

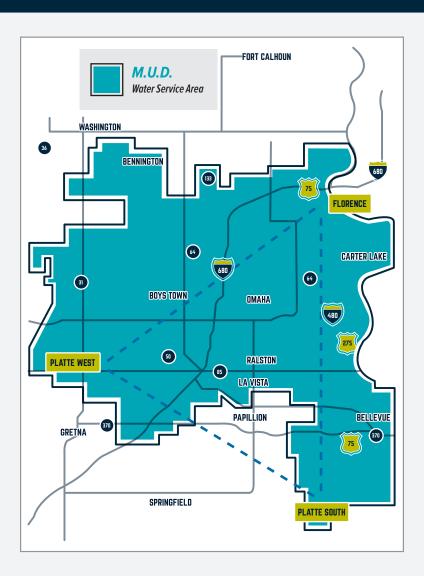
The Nebraska Department of Environment and Energy (NDEE) completed the source water assessment which includes a wellhead protection area map, potential contaminant source inventory, vulnerability rating and source water protection information.

To better protect the quality of the water in our wellfields, we have wellhead protection plans for our Platte South and Platte West wellfields.

Wellhead protection is the management of the land surrounding a water supply well to prevent contamination of the water supply. The plans provide a detailed account of the potential threats to the facilities and a summary of existing and recommended management strategies.

To view the source water assessment report or the wellhead protection plans, visit the Water Resources page on **mudomaha.com**.

If you have additional questions, please call Customer Service at 402.554.6666 or email customer\_service@mudnebr.com.



## THREE TREATMENT PLANTS FORM A "TRIANGLE OF RELIABILITY"

M.U.D. operates three water treatment plants — Florence, Platte West and Platte South — to serve the water supply needs of the metro Omaha area. M.U.D. also operates and maintains more than 3,100 miles of mains that deliver safe drinking water to the taps of 227,433 homes and businesses. We serve an average of 90 million gallons of water per day to the community and maintain more than 27,000 hydrants for fire protection.



## PROCESS

#### 1. Sedimentation

Settle out silt

#### 2. Clarification & Softening

Remove silt and hardness (some minerals)

#### 3. Disinfection

Destroy bacteria and parasite

### 4. Filtration

Remove very fine suspended matter

We use chloramines in the water treatment process to kill bacteria that cause diseases such as typhoid and cholera. Approximately 20% of water supply systems in the U.S., including Council Bluffs and Lincoln, use chloramine as a disinfection agent.

Chloramine, a mixture of chlorine and ammonia, does not dissipate through boiling or exposure to the air in open containers as rapidly as chlorine. Chloraminated water is safe for warm-blooded animals to drink, including humans, kidney dialysis patients, pregnant women, infants, dogs, cats and birds, because their digestive systems neutralize chloramine before it reaches their bloodstreams.

Fish tank, aquarium and pond owners need to use filtration equipment or water treatment products to neutralize chloramines. These products are available at pet supply stores.

Chloramine is toxic to cold-blooded animals, such as fish, reptiles, turtles and amphibians because it enters directly into their bloodstreams. Fish tank, aquarium and pond owners need to use filtration equipment or water treatment products to neutralize chloramines. These products are available at pet supply stores.

Before use in a home kidney dialysis system, the water must be treated. Check with your equipment supplier and/or physician.

M.U.D. adds fluoride to its treated water to promote dental health. Omaha voters approved fluoridation in 1968. In 2008, the Nebraska Unicameral passed LB 245 which requires all Nebraska cities and towns with populations over 1,000 to add fluoride to public water systems.

Both the Missouri and Platte Rivers have naturally-occurring fluoride in the range of 0.3 to 0.5 parts per million (ppm). The District adds enough fluoride to make the tap water concentration approximately 0.7 ppm, well below the federal limit of 4.0 ppm.







# TESTING & RESULTS



## M.U.D. IS REQUIRED TO TEST FOR THE FOLLOWING CONTAMINANTS:

- 1,1,1,2-TETRACHLOROETHANE
- 1,1,1-TRICHLOROETHANE
- 1,1,2,2-TETRACHLOROETHANE
- 1,1,2-TRICHLOROETHANE
- 1,1-DICHLOROETHANE
- 1,1-DICHLOROETHYLENE
- 1.1-DICHLOROPROPENE
- 1,2,3-TRICHLOROBENZENE
- 1,2,4-TRICHLOROBENZENE
- 1,2,4-TRIMETHLYBENZENE
- 1,2-DIBROMO-3-
- CHLOROPROPANE (DBCP)
- 1,2-DICHLOROETHANE
- 1,2-DICHLOROPROPANE
- 1,3,5-TRIMETHYLBENZENE
- 1,3-DICHLOROPROPANE
- 2,2-DICHLOROPROPANE • 2,4,5-TP (SILVEX)
- 2,4-D
- 3-HYDROXYCARBOFURAN
- ALDICARB
- ALDICARB SULFONE ALDICARB SULFOXIDE
- ALDRIN
- ANATOXIN-A
- ANTIMONY
- AROCHLORS (POLYCHLORINATED **BIPHENYLS)**
- ARSENIC
- ASBESTOS

- ATRAZINE
- BARIUM BENZENE
- BENZO(A)PYRENE
- BERYLLIUM
- BHC-GAMMA (LINDANE)
- BROMOBENZENE
- BROMOCHLOROACETIC ACID
- BROMOCHLOROMETHANE
- BROMODICHLOROMETHANE
- BROMOFORM
- BROMOMETHANE
- BUTACHLOR
- CADMIUM
- CARBARYL CARBOFURAN
- CARBON TETRACHLORIDE
- CARBON (TOTAL ORGANIC CARBON)
- CHLORDANE
- CHLOROBENZENE
- CHLOROETHANE
- CHLOROFORM
- CHLOROMETHANE
- CHLOROPYRIFOS
- CHROMIUM
- CIS-1,2-DICHLOROETHYLENE
- CIS-1.2-DICHLOROPROPENE
- COLIFORM BACTERIA
- COPPER

- CYANAZINE
- CYANIDE • CYLINDROSPERMOPSIN
- DALAPON
- DI(2-ETHYLHEXYL) ADIPATE
- DI(2-ETHYLHEXYL) PHTHALATE
- DIBROMOACETIC ACID
- DIBROMOCHLOROMETHANE
- DIBROMOMETHANE
- DICAMBA
- DICHLOROACETIC ACID
- DICHLORODIFLUOROMETHNE
- DICHLOROMETHANE
- DIELDRIN
- DINOSEB
- DIQUAT
- E. COLI
- ENDOTHALL
- ENDRIN
- ETHYLBENZENE
- ETHYLENE DIBROMIDE (EDB)
- FLUORIDE
- FONOFOS
- GROSS ALPHA, INCLUDING
- RADON & URANIUM
- HEPTACHLOR
- HEPTACHLOR EPOXIDE
- HEXACHLOROBENZENE
- HEXACHLOROBUTADIENE

- HEXACHLOROCYCLOPENTADIENE
- ISOPROPYLBENZENE
- · LASSO (ALACHLOR)

• IRON

- LEAD • M-DICHLOROBENZENE
- MERCURY
- METHOMYL
- METHOXYCHLOR
- METHY TERT-BUTYL ETHER
- METOLACHLOR
- METRIBUZIN
- MONOBROMOACETIC ACID
- MONOCHLOROACETIC ACID
- N-BUTYLBENZENE
- N-PROPYLBENZENE
- NAPHTHALENE
- NICKEL
- NITRATE
- NITRITE
- O-CHLOROTOLUENE
- O-DICHLOROBENZENE
- OXAMYL (VYDATE)
- P-CHLOROTOLUENE
- P-DICHLOROBENZENE
- P-ISOPROPYLTOLUENE
- PARAQUAT
- PARATHION (ETHYL)
- PENTACHLOROPHENOL

- PICLORAM
- PROPACHLOR
- RADIUM-226
- RADIUM-228 SEC-BUTYLBENZENE
- SELENIUM
- SIMAZINE
- STYRENE
- SULFATE
- SUTAN
- TERBUFOS • TERT-BUTYLBENZENE
- TETRACHLOROETHYLENE
- THALLIUM
- TOLUENE
- TOTAL MICROCYSTINS & **NODULARINS**
- TOXAPHENE
- TRANS-1,2-DICHLOROETHYLENE
- TRANS-1,2-DICHLOROPROPENE
- TRICHLOROACETIC ACID TRICHLOROETHYLENE
- TRICHLOROFLUOROMETHANE
- TRIFLURALIN
- VINYL CHLORIDE
- XYLENES (TOTAL)

## **CRYPTOSPORIDIUM TESTS**

We tested the source and treated water for Cryptosporidium in the Water Quality Lab at our three water plants in 2023. Although Cryptosporidium was detected in source water in January and December, the organisms were not found in tap water.

Cryptosporidium, a protozoan parasite and one-celled animal, is too small to be seen without a microscope. It's common in surface waters (lakes and rivers), especially when these waters contain sewage or

animal waste. Cryptosporidium must be ingested to cause infection. Symptoms include diarrhea, nausea and abdominal cramps. Most healthy individuals can overcome the infection within a few weeks.

We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium may be spread through means other than drinking water.

## **READING THE RESULTS**



#### **Action Level**

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



## Nephelometric Turbidity Unit

A measure of the clarity of water.



#### **Parts Per Trillion**

1 part per trillion (or picogram per liter) and corresponds to 1 minute in 2 million years or 1 penny in 10 billion dollars.



## Maximum Contaminant Level

The highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.



#### **Parts Per Million**

1 part per million (or milligram per liter) and corresponds to 1 minute in 2 years or 1 penny in 10 thousand dollars.



#### **PicoCuries Per Liter**

Measurement of radioactivity.



Not applicable



Less than



More than

## 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.



#### **Parts Per Billion**

1 part per billion (or microgram per liter) and corresponds to 1 minute in 2,000 years or 1 penny in 10 million dollars.

## **POSSIBLE SOURCE WATER CONTAMINANTS**



## Microbial Contaminants

Viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.



#### Inorganic Contaminants

Salts and metals, which can be naturally occurring or result from urban storm water run-off, industrial or domestic wastewater discharges, oil and gas production, mining or farming.



## Pesticides and Herbicides

May come from a variety of sources such as agriculture, urban storm water run-off and residential uses.



## Organic Chemical Contaminants

Synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also can come from gas stations, urban storm water run-off and septic systems.



## Radioactive Contaminants

Can be naturally-occurring or be the result of oil and gas production and mining activities.



Results collected between 01/01/2023 through 12/31/2023 unless otherwise noted. The Nebraska Department of Environment and Energy requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than a year old.

## **COLIFORM BACTERIA**

**Total Coliform** 

of monthly samples are positive



**Highest Percentage of Positive Total Coliform Samples in any Month** 



**Violation?** 

YES X NO

**Likely Source** of Contamination

Naturally present in the environment; used as an indicator that other potentially harmful bacteria may be present.

## **LEAD**

7.59<sub>ppb</sub>







Sites over Al



Range of Levels (ppb): <0.5 — 77.8

#### **Likely Source of Contamination**

Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.

Monitoring period: 2020-2023; Sampled 08/2/22 - 10/12/22

## **COPPER**

0.0186<sub>ppm</sub>



AL

**Sites over AL** 



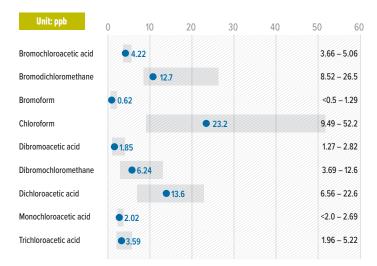
Range of Levels (ppm): <0.0025 - 0.0889

## **Likely Source of Contamination**

Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.

Monitoring period: 2020-2023; Sampled 08/2/22 - 10/12/22

## **UNREGULATED WATER QUALITY DATA**



disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects and may lead to an increased risk of getting cancer.

Total Organic Carbon (TOC) has no health effects. However, TOC provides a medium for the formation of

Average Level Detected

**Total Organic** 

Carbon (TOC)

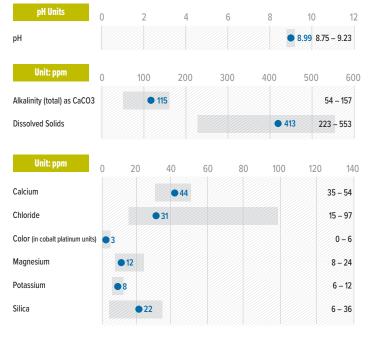
Range of Levels Detected

2.56 - 4.22



\*Results from 4/7/2021

## **MINERAL ANALYSIS**

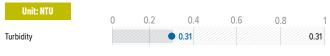








## **REGULATED CONTAMINANTS**



(Monitoring period is 1/1/2023 - 12/31/2023)

0.31

**Highest level** detected

100%

**Monthly percentage** <0.3 NTU

## **Violation?**

YES X NO **Likely Source of Contamination** Soil run-off.

## **RADIOACTIVE CONTAMINANTS**



(Monitoring period is 1/1/2023 - 12/31/2025)

6.38

**Highest level** detected



**MCLG** 



\*\*MCL is based on Gross alpha excluding rado and uranium.

## **Violation?**



**Likely Source of Contamination** 

Erosion of natural deposits.

## **DISINFECTANTS & DISINFECTANT BY-PRODUCTS**



(Monitoring period is 4/1/2022 - 3/31/2023)

21.2

**Highest running** annual average









## Violation? YES

#### **Likely Source of Contamination**

By-product of drinking water chlorination.

#### Unit: ppb 50 90 10 40 60 70 80 20 30 Total Tribalomethanes 24.7 - 92.6 (TTHMS)

(Monitoring period is 1/1/2023 - 12/31/2023)

42.5

**Highest running** annual average

**MCLG** 



## Violation?

YES NO



#### **Likely Source of Contamination**

By-product of drinking water chlorination.

## Notes on Haloacetic Acids in drinking water

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

\*MCL is based on a system-wide running annual average of several samples.

#### Notes on Trihalomethanes in drinking water

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous system, and may have an increased risk of cancer.

## **INORGANIC CONTAMINANTS**

**ARSENIC** 

Monitoring period: 1/1/2023 - 12/31/2025 **Unit:** ppb

Highest Level

Range 1.44

Violation?

YES X NO

#### Notes on Arsenic in drinking water

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known at high concentrations to cause cancer in humans and is linked to other health effects such as skin damage and circulatory problems.

**Likely Source of Contamination** 

Erosion of natural deposits; run-off from orchards, glass and electronics production wastes.

**ATRAZINE** 

Monitoring period: 1/1/2023 – 12/31/2025

**Unit:** ppb

Violation?

YES X NO

Likely Source of Contamination: Erosion of natural deposits; run-off from orchards, glass and electronics production wastes.

**BARIUM** 

Monitoring period: 1/1/2023 - 12/31/2025 **Unit:** ppm

0.086 -

Range Levels

Violation?

YES X NO

Likely Source of Contamination: Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries.

**CHROMIUM TOTAL** 

Monitoring period:

**Unit:** ppb

Level

Range 1.74

100 MCLG

**Violation?** 

YES X NO

Likely Source of Contamination: Erosion of natural deposits; discharge from steel and pulp mills.

**FLUORIDE** 

Monitoring period: 1/1/2023 - 12/31/2023 **Unit:** ppm

0.807

**Violation?** 

YES X NO

Likely Source of Contamination: Erosion of natural deposits; water additive to promote strong teeth; fertilizer discharge.

**NITRATE-NITRATE** 

Monitoring period: 1/1/2023 – 12/31/2023

**Unit:** 

Violation? YES X NO

Likely Source of Contamination: Erosion of natural deposits; run-off from fertilizer use; leaching from septic tanks, sewage.

**SODIUM** 

Monitoring period: 1/1/2023 - 12/31/2023 **Unit:** ppm **Highest Detected**  Levels

**500** (

**Violation?** YES X NO

Likely Source of Contamination: Element of the alkali metal group found in nature, soil and rocks.

**SELENIUM** 

Monitoring period: 1/1/2023 - 12/31/2025 **Unit:** ppb

Level

Range

Violation? YES X NO

Likely Source of Contamination: Erosion of natural deposits; discharge from petroleum and metal refineries; discharge from mines.





## **UCMR4 (UNREGULATED)**

Highest Level Detected	Range of Levels Detected

ANATO	XIN-A	BROMODICHLOI	ROACETIC ACID	GERMANIUM		QUINOLINE		
<0.03 ppb	<0.03	2.85 ppb	0.89 — 2.85	<0.30 ppb	<0.30	<0.02 ppb	<0.02	
CYLINDROSPERMOPSIN		BUTYLATED HYDROXYANISOLE		ALPHA-HEXACHLOROCYCLOHEXANE		TEBUCONAZOLE		
<0.09 ppb	<0.09	<0.03 ppb	<0.03	<0.01 ppb	<0.01	<0.20 ppb	<0.20	
TOTAL MICROCYSTI	INS & NODULARINS	CHLORODIBRON	MOACETIC ACID	MANGANESE		O-TOLUIDINE		
<0.03 ppb	<0.03	1.52 ppb	0.30 <b>–</b> 1.52	<0.671 ppb	<0.671	<0.007 ppb	<0.007	
1-BUT	ANOL	CHLORP	YRIFOS	MONOBROMO	DACETIC ACID	TOTAL ORGANIC CARBON*		
<2.0 ppb	<2.0	<0.03 ppb	<0.03	<0.30 ppb	<0.30	3840 ppb	1960 — 3840	
2-METHOX	2-METHOXYETHANOL		DIBROMOACETIC ACID		MONOCHLOROACETIC ACID		TRIBROMOACETIC ACID	
<0.40 ppb	<0.40	1.82 ppb	1.12 <b>–</b> 1.82	2.68 ppb	2.00 <b>—</b> 2.68	<2.0 ppb	<2.0	
2-PROP	2-PROPEN-1-OL		DICHLOROACETIC ACID		OXYFLUORFEN		TRICHLOROACETIC ACID	
<0.50 ppb	<0.50	15.0 ppb	8.93 <b>–</b> 15.0	<0.05 ppb	<0.05	5.95 ppb	0 — 5.95	
BROMIDE*		DIMETHIPIN		PERMETHRIN, CIS & TRANS		TRIBUFOS		
65.6 ppb	53.0 <b>–</b> 65.6	<0.20 ppb	<0.20	<0.04 ppb	<0.04	<0.07 ppb	<0.07	
BROMOCHLOROACETIC ACID		ETHOPROP		PROFENOFOS				
5.84 ppb	4.21 — 5.84	<0.03 ppb	<0.03	<0.30 ppb	<0.30	*Bromide and Total Org were from source wat taken from finished w	er, all other samples	

## **PFAS CONTAMINANTS**

All contaminants tested were found below the Practical Quantitation Limit (PQL) indicated for each contaminant.

CONTAMINANT	RESULT
perfluorobutanoic acid (PFBA)	<0.005 ug/L
PFMPA	<0.004 ug/L
perfluoropentanoic acid (PFPeA)	<0.003 ug/L
Perfluorobutanesulfonic acid (PFBS)	<0.003 ug/L
PFMBA	<0.003 ug/L
perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	<0.003 ug/L
NFDHA	<0.020 ug/L
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2FTS)	<0.003 ug/L
perfluorohexanoic acid (PFHxA)	<0.003 ug/L
perfluoropentanesulfonic acid (PFPeS)	<0.004 ug/L
hexafluoropropylene oxide dimer acid (HFPO-DA)	<0.005 ug/L
Perfluoroheptanoic acid (PFHpA)	<0.003 ug/L
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	<0.003 ug/L
Perfluorohexanesulfonic acid (PFHxS)	<0.003 ug/L

1H,1H,2H,2H-perfluorooctane sulfonic acid (6:2FTS)	<0.005 ug/L
Perfluorooctanoic acid (PFOA)	<0.004 ug/L
perfluoroheptanesulfonic acid (PFHpS)	<0.003 ug/L
perfluorooctanesulfonic acid (PFOS)	<0.004 ug/L
Perfluorononanoic acid (PFNA)	<0.004 ug/L
9CI-PF30NS	<0.002 ug/L
1H,1H,2H,2H-perfluorodecane sulfonic acid (8:2FTS)	<0.005 ug/L
perfluorodecanoic acid (PFDA)	<0.003 ug/L
Perfluoroundecanoic acid (PFUnA)	<0.002 ug/L
11CI-PF30UdS	<0.005 ug/L
perfluorododecanoic acid (PFDoA)	<0.003 ug/L
Perfluorobutanesulfonic acid (PFBS)	<0.005 ug/L
perfluorohexanoic acid (PFHxA)	<0.005 ug/L
hexafluoropropylene oxide dimer acid (HFPO-DA)	<0.005 ug/L
Perfluoroheptanoic acid (PFHpA)	<0.005 ug/L

<0.005 ug/L
<0.005 ug/L
<0.006 ug/L
<0.005 ug/L
<0.005 ug/L
<0.005 ug/L
<0.005 ug/L
<0.007 ug/L
<0.008 ug/L

# PUBLIC HEALTH & HOME WATER USAGE

SAFE DRINKING WATER HOTLINE 800.426.4791 WEBSITE water.epa.gov/drink

## **PUBLIC MEETINGS**

The M.U.D. Board of Directors generally meets the first Wednesday of every month at the District's Headquarters at 7350 World Communications Drive. Meeting dates and agendas are available at **mudomaha.com** or by calling 402.504.7147. Requests for special accommodations, alternative formats or sign language interpreters require a minimum of 72 hours advance notice. Access to our livestream and recorded board meetings is available at **mudomaha.com**.

To ensure tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations to limit the amounts 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.

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 risks may be obtained by calling the EPA's Safe Drinking Water Hotline at 800.426.4791 or visiting water.epa.gov/drink.

## **TIER 3 NOTICE**

### WHAT HAPPENED?

Metropolitan Utilities District is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether your drinking water meets health standards. During the month of April 2023, we did not complete all monitoring at an individual filter and therefore cannot be sure of the quality of your drinking water at that time.

Systems that provide conventional filtration treatment or direct filtration must conduct continuous monitoring of turbidity for each individual filter. In April 2023, monitoring was conducted but accurate results cannot be verified at an individual filter, since the continuous monitoring turbidity meter seized. Finished water and source water monitoring indicates turbidity readings were well below the regulated nephelometric turbidity units (NTU). Additionally, bacteria monitoring on the filter in question was monitored and no problems were presented.

## WHAT DOES THIS MEAN?

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasite that can cause symptoms such as nausea, cramps, diarrhea and associated headache.

#### WHAT SHOULD I DO?

There is nothing you need to do at this time. Alternate water, such as bottled water, is not required. However, if you have health concerns, you may want to consult your physician.

### WHAT IS BEING DONE?

M.U.D. has been in compliance with verifying turbidity results at the individual filter since the issue was discovered.

## **EXPECTED RESOLUTION DATE**

Systems must record the results of individual filter monitoring a minimum of every 15 minutes and the System resolved the issue by: May 4, 2023

### FOR ADDITIONAL INFORMATION REGARDING THIS NOTICE INTERESTED PERSONS MAY CONTACT:

Interim Designated Operator: Chris Fox, 402.504.7461

Interim Vice President, Water Operations: Andy Melville, 402.504.7790

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

# M.U.D. DRINKING WATER CONSISTENTLY MEETS OR EXCEEDS EVERY FEDERAL AND STATE REQUIREMENT.

Providing safe and healthy water to the Omaha metro community since 1913.



## **Buy Local**

A gallon of tap water costs less than a penny.



## **Choose Tap**

50% of bottled water comes from the tap.



#### **Passes the Test**

Tap water is tested more than bottled water.



## **Eco-friendly Beverage**

From your tap to you, without plastic or pollution-producing shipping.



## **Drink it Up!**

We can produce over 300 million gallons of drinking water daily.



A remote rain sensor shut-off device is a good way to conserve water. We offer a \$75 rebate when you have a rain shut-off device and/or a Wi-Fi sprinkler predictive controller installed by an irrigation company. For details and restrictions, visit mudomaha.com/rebates.



## **HEALTH NOTES**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people — such as those with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, and some older adults and infants — can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers.

The EPA and the Center for Disease Control and Prevention guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 800.426.4791 or **water.epa.gov/drink**.

Women who are pregnant, infants and children typically are more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing.

See page 14 for more information about lead in drinking water.

## **WISE WATER USE TIPS**

- To help reduce system demands and maintain optimum water pressures, schedule your lawn watering based on your address. If your address ends in an odd number, water on Monday, Wednesday and Friday. If it ends in an even number, water on Tuesday, Thursday, Saturday or Sunday.
- Water in the early morning, between 4 to 10 a.m., to allow grass blades to dry, making them less susceptible to diseases. Watering is more efficient in the morning due to less evaporation and wind speed. Don't water if it's windy.
- Measure the amount of water applied to your lawn in a 15-minute period using a tuna can.
   Adjust the run time on your sprinkler system to deliver the required amount. Contact a lawn care professional if you need help.
- To conserve water, make sure your sprinkler heads are in working order and directed on your lawn and not on sidewalks, driveways and streets. Use sprinklers that emit large droplets to reduce losses due to evaporation.
- Check hose connections for leaks and repair them quickly. A single hose left on uses nearly 300 gallons of water an hour!
- Use a broom to clean patios, sidewalks and driveways.

For more tips, visit mudomaha.com.

## **LEAD AND DRINKING WATER**

M.U.D. is committed to providing information and resources to customers about lead and drinking water. Lead service lines may be found in areas of Omaha and other communities within our system in homes built prior to 1940. These water service lines are the homeowner's responsibility and replacement costs can be high.

M.U.D. has developed a program to replace all identified lead service lines in its service area over the next 10 years. As part of this Lead Service Line Replacement Program — Detect. Correct. Protect. — replacement priority will be given to areas with a large number of homes with infants and children, and areas with high concentrations of lead and service lines.

## IS THERE LEAD IN M.U.D.'S WATER?

No. M.U.D. conducts monthly tests for lead and it is not detected in source (raw) water, in the finished water from the District's water treatment plants, or in the water in the distribution system (water mains). M.U.D. produces stable, non-corrosive water. Lead is mainly a localized customer issue, which means some customers may own a lead service line or have plumbing that includes lead solder.

## HOW DO I FIND OUT IF I HAVE A LEAD SERVICE LINE?

The pipe that connects your household plumbing to the water main in the street is called a service line, which you own. An interactive map is available at **mudomaha.com/lead**, which allows customers to search their address and determine whether their service line is lead. M.U.D. customers may also email lead@mudnebr.com or call 402.504.7029 to find out what the District's records indicate about their service line material.

## CAN I GET MY WATER TESTED FOR LEAD?

Yes. Customers who have partial or whole lead service lines (or the composition is unknown) installed before 1940 can request M.U.D. to test for lead. To request a test, call 402.504.7029. M.U.D.'s Water Quality Lab conducts the tests and submits results to the Nebraska Department of Environment and Energy (NDEE).

## WHAT CAUSES ELEVATED LEVELS OF LEAD AND HOW CAN I REDUCE EXPOSURE?

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. M.U.D. 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. 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 or galvanized service line requiring replacement, 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 M.U.D. at 402.504.7029.

Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available at **epa.gov/safewater/lead**.

### **DO I NEED A WATER FILTER?**

If it is determined you have a lead service line, M.U.D. will provide a pitcher for your use, upon request. Use of a supplemental filter is a personal preference, however it can be harmful if not properly maintained. In selecting a filter, determine what substance(s) is/are to be removed and look for a filter that has an NSF/UL certification to remove it. Information on plumbing fixtures and in-home filters is available from the National Sanitation Foundation by calling 1.800.NSF.MARK or visitingnsf.org.

## WHAT ARE THE HEALTH EFFECTS OF LEAD?

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.

## DOES THE FEDERAL GOVERNMENT MONITOR WATER FOR LEAD?

Yes. In 1991, the EPA published a regulation to control lead and copper in drinking water, known as the Lead and Copper Rule. The EPA revised the regulation in 2000, 2007 and 2021. Congress has also set limits on the amount of lead that can be used in plumbing products. These requirements were first enacted in 1986 and then reduced to lower levels in 2011.

The NDEE performs all of the testing for M.U.D.'s compliance with the Lead and Copper Rule. M.U.D.'s role is to deliver the sample kits to the customer, collect them and send them to DHHS for testing. M.U.D. is required to sample for lead and copper every three years. The most recent round of lead and copper testing was completed in fall of 2022. The 90th percentile (action level) was 7.59 ppb, well below the regulatory limit of 15 ppb.

Due to the proposed changes in the Lead and Copper Rule, M.U.D. continues to study the effects of customer-owned lead service lines in the community. This ongoing study includes testing the water in homes known to have lead service lines.

## **BACKFLOW PREVENTION**

According to the Safe Drinking Water Act, the NDEE requires M.U.D. to make sure backflow preventers are installed and tested every year. We keep records of these tests and issue notices when testing is due.

This requirement does not apply to lawn sprinkler systems unless they use booster pumps or chemical injection systems.

Also check your city's plumbing code for their regulations.

## WHAT IS POTENTIALLY DANGEROUS ABOUT AN UNPROTECTED SILL COCK?

A sill cock permits easy attachment of a hose for outside watering. However, a garden hose with an unprotected sill cock can be hazardous when left submerged in swimming pools, watering shrubs, and when chemical sprayers are attached to hoses.

## PROTECT YOURSELF FROM BACKFLOW INCIDENTS:

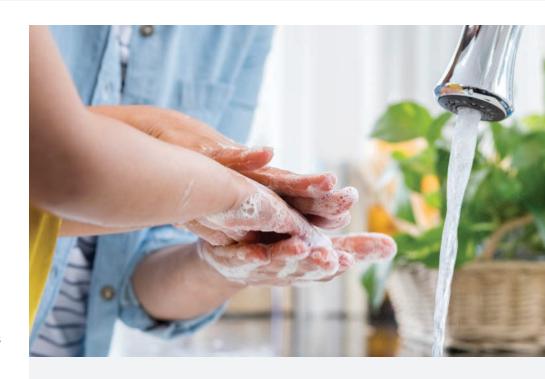
Check your faucets to make sure all faucet endpoints are above the flood level of the sink, tub, basin or other apparatus they supply.

Protect your faucet extensions by installing proper backflow prevention devices on all faucets capable of having a hose or other extension attached.

Check drain lines (refrigerator drink dispensers, water softeners, heat exchangers, etc.) to make sure there is an adequate air gap between the drain line and the floor drain or sewer line into which they discharge.

Never use unprotected faucets to fill nondrinking water containers (i.e., water beds, wading pools, stock tanks, hot tubs, etc.).

Filling up your pool? Make sure to take the hose out of the pool once it is filled to prevent water backflow.



## **HOME WATER TREATMENT DEVICES**

M.U.D. meets all state and federal water quality standards so home water treatment devices are not necessary. Use of a supplemental filter is a personal preference, however it can be harmful if not properly maintained. If it is determined you have a lead service line, M.U.D. will provide a pitcher for your use, upon request.

In selecting a filter, determine what substance(s) is/are to be removed and look for a filter that has an NSF/UL certification to remove it.

## DOES USING A HOME WATER TREATMENT DEVICE GUARANTEE THAT MY WATER IS SAFE?

No. The U.S. EPA does not recommend home treatment devices as a substitute for public water treatment because of the difficulty in monitoring their performance. Home treatment devices are not tested or regulated by the federal government. Some, however, are tested by independent laboratories. If you want to use a water treatment device, carefully choose one according to the water conditions in your area. Also, be aware that a device needs to be properly maintained or it could cause water quality problems.

## HOW OFTEN SHOULD I REPLACE THE FILTERS ON MY TREATMENT DEVICES LIKE THE WATER DISPENSER ON MY REFRIGERATOR?

All units require some maintenance, and it is important to follow the manufacturer's recommendations for replacements. For example, activated carbon filters are designed to filter a certain amount of water. After that, the filters become clogged and ineffective.

WHERE CAN I GET MORE INFORMATION?

Information on plumbing fixtures and in-home filters is available from the National Sanitation Foundation by calling 1.800.NSF.MARK or visiting nsf.org. Resources also are available on the EPA's website at water.epa.gov/drink.

