

2023 WATER QUALITY REPORT FOR MINBURN WATERWORKS

This report contains important information regarding the water quality in our water system. All water provided by Minburn Waterworks in this system is purchased from Xenia Rural Water District. The source of Xenia RWD's water is groundwater and purchased surface water from Des Moines Water Works. Our water quality testing shows the following results:

Xenia Rural Water Districts Water Quality Results:

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
Copper (ppm)	1.3	AL=1.3	ND 90 th	2021	ND	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	0	AL=15	ND 90 th	2021	ND	No	Corrosion of household plumbing systems; erosion of natural deposits
Chlorine (ppm)	MRDLG=4.0	MRDL+4.0	3.5	2023	ND – 3.5	No	Water additive used to control microbes
TTHM (ppb) [Total trihalomethanes]	N/A	80	53 LRAA	7/16/2021	N/A	No	By-products of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	N/A	60	12 LRAA	7/16/2021	N/A	No	By-products of drinking water disinfection
Nitrite [as N] (ppm)	1	1	0.1205	2023	N/A	No	Runoff from fertilizer use; Leaching from septic tanks, sewage.; Erosion of natural deposits

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

PURCHASED WATER INFORMATION

Our water system purchases water from the systems below. Their water quality is as follows:

7727031 – DES MOINES WATER WORKS							
03 – MCMULLEN AFTER TREATMENT							
Fluoride (ppm)	4	4	0.94	2023	0.09 – 0.94	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	NA	NA	35	2023	14 - 35	No	Erosion of natural deposits; added to water during treatment process
Total Organic Carbon (TOC)	N/A	TT	Annual removal ratio 2.96	2023	Minimum removal ratio 1	No	Naturally present in the environment
Nitrate [as N] (ppm)	10	10	5.61	2023	0.06 – 5.61	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Turbidity (NTU)	NA	NA	0.21	2023	0.04 – 0.21	No	Soil runoff
Lithium (ug/L)	NA	NA	25	2023	ND - 25	No	
Dalapon (ppb)	200	200	0.20 SGL	9-19-2022	N/A	No	Runoff from herbicide used on rights of way
04 – RACCOON, DES MOINES & GALLERY FLEUR							
Fluoride (ppm)	4	4	0.90	2023	0.56 – 0.90	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories

Sodium (ppm)	NA	NA	48	2023	15 – 48	No	Erosion of natural deposits; added to water during treatment process
Total Organic Carbon (TOC)	N/A	TT	3.08	2023	Minimum removal ratio 1	No	Naturally present in the environment
Nitrate [as N] (ppm)	10	10	7.15	2023	ND – 7.15	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Cis-1,2 Dichloroethylene (ppb)	70	70	0.5 SGL	2023	N/A	No	Discharge from industrial chemical factories
Turbidity (NTU)	NA	NA	0.18	2023	0.04 – 0.18	No	Soil runoff
Atrazine (ppb)	3	3	0.20	07/05/2022	NA	No	Runoff from herbicide used on row crops
Lithium (ppb)	NA	NA	28	2023	ND - 28	No	

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
05 – LP MOON ASR S/EP AFTER TREATMENT							
Sodium (ppm)	NA	NA	80	2023	21 – 80	No	Erosion of natural deposits; added to water during treatment process
Arsenic (ppb)	0	10	ND	2023	ND	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronic production wastes
Fluoride (ppm)	4	4	1.39	2023	0.72 – 1.39	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Nitrate [as N] (ppm)	10	10	3.34	2023	0.88 – 3.34	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Gross Alpha, inc (pCi/L)	0	15	2.3	2023	NA	No	Erosion of natural deposits
Atrazine (ppb)	3	3	ND	2023	NA	No	Runoff from herbicide used on row crops
06 – MCMULLEN ASR S/EP							
Sodium (ppm)	NA	NA	35	2023	16 - 35	No	Erosion of natural deposits; added to water during treatment process
Fluoride (ppm)	4	4	0.94	2023	0.60 – 0.94	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Arsenic (ppb)	0	10	ND	2023	NA	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronic production wastes

Nitrate [as N] (ppm)	10	10	5.21	2023	0.09 – 5.21	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Gross Alpha, inc (pCi/L)	0	15	5.1	2023	NA	No	Erosion of natural deposits
Combined Radium (pCi/L)	0	5	1.7	2023	NA	No	Erosion of natural deposits
07 – SAYLORVILLE S/EP (AFTER TREATMENT)							
Fluoride (ppm)	4	4	0.83	2023	0.60 – 0.83	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Barium (ppm)	2	2	0.07	01/27/2020	NA	No	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Sodium (ppm)	NA	NA	22	2023	14 – 22	No	Erosion of natural deposits; added to water during treatment process
Nitrate [as N] (ppm)	10	10	1.64	2023	ND – 1.64	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Organic Carbon (TOC)	N/A	TT	Annual removal ratio 3.49	2023	Minimum removal ratio 1	No	Naturally present in the environment
Turbidity (NTU)	NA	NA	0.10	2023	0.02 – 0.10	No	Soil runoff
Lithium (ppb)	N/A	N/A	20	2023	ND – 20	No	
CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
08 – ARMY POST ASR (AFTER TREATMENT)							
Gross Alpha, inc (pCi/L)	0	15	9	2023	NA	No	Erosion of natural deposits
Combined Radium (pCi/L)	0	5	1.8	2023	NA	No	Erosion of natural deposits
Sodium (ppb)	NA	NA	105	2023	26 - 105	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10	10	1.65	2023	0.22 – 1.65	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride (ppm)	4	4	1.60	2023	0.93 – 1.60	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Arsenic (ppb)	0	10	2	2023	ND – 2	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronic production wastes
Dichloromethane (ppb)	0	5	1.2 SGL	7/05/2022	N/A	No	Discharge from pharmaceutical and chemical factories

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

DEFINITIONS

- Maximum Contaminant Level (MCL) – 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 (MCLG) -- 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.
- ppb -- parts per billion.
- ppm -- parts per million.
- pCi/L – picocuries per liter
- N/A – Not applicable
- ND – Not Detected
- RAA – Running Annual Average
- LRAA – Locational Running Annual Average
- Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- 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.
- 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.
- SGL – Single Sample Result
- RTCR – Revised Total Coliform Rule
- NTU – Nephelometric

GENERAL 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 posed a health risk. More information about contaminants or 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 Safe Drinking Water Hotline (800-426-4791).

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. Xenia Rural Water District 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 or at <http://www.epa.gov/safewater/lead>.

Source water assessment information

This water supply obtains some or all of its water from another public water supply. It is a consecutive water supply, where an originating parent supply provides drinking water to one or more downstream supplies.

Original Supply ID	Original Supply Name
IA7727031	Des Moines Water Works

OTHER INFORMATION

Turbidity is an indicator of treatment filter performance and is regulated as a treatment technique.

Our water utility is making every effort to protect the water system from potential security threats. You, as customers, can also help. If you see any suspicious activity near the water tower, treatment plant, wells or fire hydrants, please contact us at 1-888-355-2619 or the local police/sheriff department. We appreciate your assistance in protecting the water system.

CONTACT INFORMATION

For questions regarding this information, please contact City Hall (515) 677-2245