

Water Quality Report

2022



cityofdubuque.org/2022waterquality

Drinking Water 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 poses a health risk. More information about contaminants or potential health effects can be obtained by submitting a form on the Environmental Protection Agency's website at www.epa.gov/ground-water-and-drinking-water or from the 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 including those 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 lower the risk of infection by Cryptosporidium and other microbial contaminants are available on the Environmental Protection Agency's website at www.epa.gov/ground-water-and-drinking-water or from the Safe Drinking Water Hotline (800-426-4791).

For questions regarding this information, please contact Christopher Lester, Water Department Manager, at 563-589-4291.



Source Water Information

The City of Dubuque obtains water from the sand and gravel of the Apple-Plum Alluvial aquifer and the Jordan (Cambrian-Ordovician) aquifer. Every aquifer has a degree of susceptibility to contamination because of the characteristics of the aquifer, overlying materials, and human activity including contamination from leaking underground storage tanks, contaminant spills, and excess fertilizer application. Susceptibility to contamination generally increases with shallower aquifers because the characteristics of the aquifer and the overlying materials provide little protection from contamination at the land surface. Susceptibility to contamination generally decreases with deeper wells in the Jordan aquifer because the characteristics of the aquifer and the overlying materials provide moderate protection from contamination at the land surface.

The Apple-Plum Alluvial aquifer is considered to be highly susceptible to contamination, while the Jordan (Cambrian-Ordovician) aquifer has been determined to be slightly susceptible to contamination. A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources, and is available on our website, www.cityofdubuque.org/water. You may also call 563-589-4291 to obtain a copy of the report.

Have you signed up for WaterSmart?

- View and pay bills
- Track daily water usage
- View tips on how to save
- Sign up for leak alerts...and more



SIGN UP TODAY!
www.cityofdubuque.org/watersmart

2021 Drinking Water Summary



The City of Dubuque's water distribution system is comprised of 330 miles of water mains, with over 8,008 control valves and over 2,606 fire hydrants throughout the city. The distribution system is supplied from the Eagle Point Water Treatment Plant where over 6 million gallons per day are treated and distributed. All perfectly tuned and working together to supply homes and businesses in Dubuque with running water.

Behind that network of infrastructure is a team working to make sure you have clean and safe drinking water every day.

The City of Dubuque's Water Department is proud of the high quality of the City's readily available water supply, which meets all state and federal drinking water quality requirements.

We are pleased to inform you that Dubuque had no drinking water violations in 2021.

The City's water quality testing results shown in this report include testing for regulated contaminants that were at detectable levels in the distributed water. The contaminants or analytes are reported in comparison to a maximum contaminant level (MCL) established by the U.S. Environmental Protection Agency's (EPA) Safe Drinking Water Act. Testing is not required for each parameter every year.

Water suppliers, including the City of Dubuque, participated in a study with the EPA related to the Unregulated Contaminant Monitoring Rule (UCMR). The USEPA establishes a new list of contaminants to be monitored and the conditions for that monitoring. The rule benefits the public health by providing the EPA with valid data on the National occurrence of selected contaminants. Under UCMR Round 4, all community water systems, and non-transient, non-community water systems serving more than 10,000 persons must participate in assessment monitoring.



Table Definitions

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

LRAA - Locational Running Annual Average

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 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.

Maximum Residual Disinfectant Level (MRDL) - The highest level of a drinking water 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.

N/A - Not Applicable

ND - Not Detected

ppb - parts per billion

ppm - parts per million

RAA - Running Annual Average

Revised Total Coliform Rule (RTCR) - Establishes a maximum contaminant level (MCL) based on the presence or absence of total coliforms, modifies monitoring requirements including testing for fecal coliforms or E. coli, requires use of a sample siting plan.

SGL - Single Sample Result

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

DISTRIBUTION SYSTEM REPORT										
ANALYTE	MCL - (MCLG)		COMPLIANCE		RANGE		DATE	VIOLATION	TYPICAL SOURCE	
			TYPE	VALUE	MIN	MAX				
Total Trihalomethanes (ppb)	80	(N/A)	LRAA	54	43	63	12/31/2021	NO	By-products of drinking water chlorination	
Total Haloacetic Acids (ppb)	60	(N/A)	LRAA	8	6	9	12/31/2021	NO	By-products of drinking water chlorination	
Total Chlorine (ppm)	MRDL = 4.0 (MRDLG = 4.0)		RAA	1.1	0.67	1.77	12/31/2021	NO	Water additive used to control microbes; disinfection	
Total Coliform Bacteria	TT	(TT)	RTCR	0 positive samples	N/A	N/A	2021	NO	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other waterborne pathogens may be present, or that a potential pathway exists through which contamination may enter the drinking water.	

FINISHED WATER TAP REPORT										
ANALYTE	MCL MCLG		COMPLIANCE		RANGE		DATE	VIOLATION	TYPICAL SOURCE	
			TYPE	VALUE	MIN	MAX				
Nitrate [as N] (ppm)	10	10	SGL	0.56	N/A	N/A	2021	NO	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.	
Fluoride (ppm)	4	4	MCL	0.62	0.29	0.95	7/21/2021	NO	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories	
Sodium (ppm)	N/A	N/A	SGL	16	N/A	N/A	7/21/2021	NO	Erosion of natural deposits; Added to water during treatment process	
Gross Alpha excluding Uranium (pCi/L)	15	0	MCL	<2.2	N/A	N/A	2018	NO	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation.	

LEAD AND COPPER REPORT											
ANALYTE	AL	MCLG	SAMPLES		COMPLIANCE		DETECT		DATE	VIOLATION	TYPICAL SOURCE
			TOTAL	EXCEED AL	TYPE	VALUE	MIN.	MAX.			
Lead (ppb)	15	0	34	1	90th	7.00	ND	23	2020	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Copper (ppm)	1.3	1.3	34	0	90th	0.04	ND	0.05	2020	NO	Corrosion of household plumbing systems; Erosion of natural deposits

UNREGULATED CONTAMINANT MONITORING RULE (UCMR 4) REPORT

RAW WATER

ANALYTE	NO. OF SAMPLES	AVERAGE VALUE	RANGE		YEAR	COMMENTS: Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether the Agency should consider regulating those contaminants in the future.
			MIN	MAX		
Bromide (ppb)	2	30.50	21.0	40.0	2018	These samples were collected as part of the requirements for UCMR 4.
Total Organic Carbon (ppm)	2	1.95	1.8	2.1	2018	These samples were collected as part of the requirements for UCMR 4
FINISHED WATER						
Manganese (ppb)	2	1.50	1.0	2.0	2018	These samples were collected as part of the requirements for UCMR 4
Germanium (ppb)	2	<0.3	<0.3	<0.3	2018	These samples were collected as part of the requirements for UCMR 4
DISTRIBUTION SYSTEM REPORT						
Chloroacetic acid (ppb)	2	<2.0	<2.0	<2.0	2018	These samples were collected as part of the requirements for UCMR 4
Bromoacetic acid (ppb)	2	<0.3	<0.3	<0.3	2018	These samples were collected as part of the requirements for UCMR 4
Dichloroacetic acid (ppb)	2	6.60	6.10	7.10	2018	These samples were collected as part of the requirements for UCMR 4
Trichloroacetic acid (ppb)	2	2.20	1.80	2.60	2018	These samples were collected as part of the requirements for UCMR 4
Bromochloroacetic acid (ppb)	2	2.70	2.50	2.90	2018	These samples were collected as part of the requirements for UCMR 4
Dibromoacetic acid (ppb)	2	1.05	1.00	1.10	2018	These samples were collected as part of the requirements for UCMR 4
Bromodichloroacetic acid (ppb)	2	1.15	1.00	1.30	2018	These samples were collected as part of the requirements for UCMR 4
Chlorodibromoacetic acid (ppb)	2	0.61	0.52	0.69	2018	These samples were collected as part of the requirements for UCMR 4
Tribromoacetic acid (ppb)	2	0.10	<0.2	2.0	2018	These samples were collected as part of the requirements for UCMR 4

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

Lead & Copper Reporting

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 City of Dubuque Water Department 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 the 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>.

CITY OF DUBUQUE WATER DEPARTMENT

www.cityofdubuque.org/water
563-589-4291

