2022 Consumer Confidence Report

The University Water system (PWSID 5225101) is pleased to report another year of providing clean and safe drinking water to the population served on the University of Iowa campus. The University Water System is owned by the University of Iowa and operated by ENGIE under a 50 year Public-Private Partnership Agreement since March 11, 2020.

ENGIE is committed to continuing to provide the same or better quality and reliability of utility services to the university community.

This report contains important information regarding the water quality in our water system. The information presented in this report is based on water samples collected from the water treatment plant and at representative points throughout the distribution system from January 1, 2022 to December 31, 2022. ENGIE prepared this consumer confidence report reflecting operation for calendar year 2022. The data presented in this report is from the most recent testing done in accordance with U.S. Environmental Protection Agency and Iowa Department of Natural Resources regulations. Certain water quality tests are only conducted every 3, 6, or 9 years. Therefore, some of the data, though representative of the water quality when tested, may be more than a year old.

The University Water System is operated and managed by ENGIE's professional, state certified water treatment and distribution operators.

Source Water Assessment Information

The University Water System's primary source of water is surface water from the Iowa River adjacent to the University Water System's treatment plant. The University Water System's secondary source of water is ground water from the Jordan (Cambrian-Ordovician) Aquifer well.

This water supply obtains water from one or more surface waters. Surface water sources are susceptible to sources of contamination within the drainage basins. The surface water name is the Iowa River and susceptibility is high.

This water supply obtains its water from the sandstone and dolomite of the Cambrian-Ordovician aquifer. The Cambrian-Ordovician aquifer was determined to have low susceptibility to contamination because the characteristics of the aquifer and overlying materials provide natural protection from contaminants at the land surface. The Cambrian-Ordovician well will have low susceptibility to surface contaminants such as leaking underground storage tanks, contaminant spills, and excess fertilizer application. A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources and is available from the University Water system or from the Iowa Department of Natural Resources.

Contact Information

For questions regarding this information or how you can get involved in decisions regarding the water system, please contact University Water System, operated by ENGIE:

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Water Treatment Plant Monitoring

Contaminant	MCL	MCLG	Type	Value	Range	Date	Violation	Possible Source
Inorganic Substances								
Sodium (ppm)	N/A	N/A	SGL	7	N/A	6/29/2022	No	Erosion of Natural Deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10	10	SGL	6.4	ND-6.4	2022	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride (mg/L)	4	4	SGL	0.76	0.56-0.89	2022	No	Water additive which promotes strong teeth; Erosion of natural deposits; discharge from fertilizer and aluminum factories;
Water Clarity								
Turbidity (NTU)	TT	N/A	Highest Single Measurement	0.12		2022	No	Soil Runoff
Lowest % of Samples Meeting Limits				100% Compliance				
Treatment Plant								
Total Organic Carbon (mg/L)	TT	N/A	Annual Removal Ratio	4.70	4.23-5.11	2022	No	Naturally Present in the Environment
Dalapon (ppb)	200	200	SGL	0.6	N/A	8/18/2021	No	Runoff from herbicide used on rights of way

Distribution System Monitoring

Contaminant	MCL	MCLG	Type	Value	Range	Date	Violation	Possible Source
Lead and Copper Monitoring Program								
Lead (ppb)	AL = 15	0	90th Percentile	0.00	ND-1200	2022	No	Corrosion of household plumbing systems; Erosion of natural deposits
Two individual samples exceeded the action level – However there was no violation of the safe drinking water								
Copper (ppm)	AL = 1.3	1.3	90th Percentile	0.08	ND-0.36	2022	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Disinfection								
Chlorine (ppm)	MRDL = 4	MRDLG = 4.0	RAA	2.22	0.81-2.9	12/31/2022	No	Water additive used to control microbes
Total Coliform Bacteria	TT	TT	RTCR	0 positive sample(s)	N/A	2022	No	Naturally present in the environment
Disinfection Byproducts								
Total Trihalomethanes (ppb) [TTHM]	80	N/A	LRAA	60	37-88	03/31/2022	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60	N/A	LRAA	15	ND-24	03/31/2022	No	By-products of drinking water disinfection

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

Unregulated Contaminants

The U.S. Environmental Protection Agency developed an Unregulated Contaminant Monitoring (UCMR) program to better understand the existence of contaminants in the environment that are not regulated by the National Primary Drinking Water Regulations, are known or anticipated to

Analyte	Average Value	Range
HAA5 (µg/L)	8.6	7.2-10
HAA6Br (µg/L)	6.91	6.42-7.81
HAA9(µg/L)	12.94	11.03-15.38

occur at public water systems and may warrant regulation under the Safe Drinking Water Act. In 2020, University Water System was required to monitor the treated water for cyanotoxins. All sample results were below the detection level. In 2020, University Water System was also required to monitor for three Brominated Haloacetic Acid (HAA) Groups in the distribution system.

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 U.S. 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 infections 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. University Water System 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.

Additional Health Information

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

Other Information

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

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.

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 Turbidity Units

mg/L – milligram per liter

µg/L – microgram per liter

ppb – parts per billion.

ppm – parts per million.

N/A – Not applicable

ND – Not detected

RAA – Running Annual Average

LRAA – Locational Running Annual Average

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