IOWA STATE UNIVERSITY
2021 DRINKING WATER CONSUMER CONFIDENCE REPORT

This document is intended to inform Iowa State University water consumers about their drinking water. Information provided in this publication represents a snapshot of 2020 water quality data. Included are details about where your water comes from, what it contains, and how it compares to the United States Environmental Protection Agency (EPA) and state standards.

SOURCE OF WATER

Iowa State campus drinking water comes from underground wells owned by the City of Ames. The wells are 87 to 150 feet deep. The City of Ames treats the raw well water and then pumps it to Iowa State University's underground piping system.

CONTAMINANTS AND HEALTH EFFECTS

Drinking water, including bottled water, may reasonably be expected to contain 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 effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

The sources of drinking water in Ames are 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 raw well 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 runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum productions, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

Some people may be more sensitive to contaminants in drinking water than the general population. Immuno-compromised individuals can be particularly at risk from infection. This includes someone who has undergone chemotherapy, has undergone organ transplants, has HIV/AIDS or other immune system disorders, is elderly, or is an infant. These individuals should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection from Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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 building plumbing. ISU is responsible for providing high quality drinking water, but there have been a large variety of materials used in plumbing components over the years. 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. Use the contacts listed under Questions and Input below to request a lead test. 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.

DEFINITIONS USED IN CONTAMINATE SUMMARY

MCL	Maximum contaminant Level – 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.
MCLG	Maximum contaminant Level goal – The level of a contaminant in drinking water below which there is no known or expected risk to health.
µg/L	Micrograms per liter; is one part of contaminant per billion parts of water.
Ppm	Parts per million is one part of contaminant per million parts of water. Also written as milligram per liter (mg/l).
ND	Not detected.
Action Level	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which must be followed.
90^{th} Percentile	The 4^{th} highest reading from a group of 30 samples. The selection of the highest reading varies with the sample size.

CONTAMINATE SUMMARY

Substance	Highest Level Allowed (EPA's MCL)	Average Value	Range of Detected Values	Year Sampled	No. of Samples	Ideal Goals (EPA's MCLGs)	Potential Source Substance
REGULATED SUBSTANCES							
Total Coliform Bacteria	Present in </=5% of monthly samples	Present in <0.5% of monthly samples	Present in 0 to 2% of monthly samples	2020	600	0%	Naturally present in the environment
Fecal Coliform Bacteria	5% per month	0 % per month	ND	2020	600	0%	Human & animal fecal wastes
Lead*	90th percentile at or above 15 µg/L (action level)	90th percentile = 1.5 µg/L	ND – 8.6 µg/L	2018	30	0 µg/L	Household plumbing fixtures
Copper*	90th percentile at or above 1.3 ppm (action level)	90th percentile = 0.0739 ppm	ND – 0.117 ppm	2018	30	<1300 µg/L	Household plumbing fixtures
Total Trihalomethanes (TTHM)	80 µg/L	ND µg/L	ND µg/L	2020	16	NA	By-product of drinking water disinfection
Total Haloacetic Acids (HAA5)	60 µg/L	5 µg/L	ND-8 µg/L	2020	16	0	By-product of drinking water disinfection
Nitrite	1 ppm	ND ppm	ND ppm	2020	1	<1 ppm	Runoff from fertilizer
REGULATED OPERATING PARAMETERS							
Flouride	4.0 ppm	0.56 ppm	0.08 – 0.97 ppm	2020	1094 By City	<4	SAMPLED BY CITY. Erosion of natural deposits. Water additive which promotes strong teeth.
Chlorine Residual	4.0 ppm	2.2 ppm	0.36-2.98 ppm	2020	600	<4	Water additive used to control microbes
Unregulated Contaminant Monitoring for EPA (UCMR4)							
Dichloroacetic Acid	NA	0.725 ppb	0.63-0.82 ppb	2018	2	NA	
Bromochloroacetic Acid	NA	0.18 ppb	ND-0.36 ppb	2018	2	NA	
Manganese	NA	0.8 ppb	0.8 ppb	2018	1	NA	

*Iowa State University is required to analyze lead & copper every 3 years. The results shown are from the most recent sampling, which was 2018.

The City of Ames Contaminate Summary is available at the Water and Pollution Control Department section of the City of Ames web site at: https://www.cityofames.org/government/departments-divisions-i-z/water-pollution-control/water-quality-report-ccr

CONTAMINANT DETECTION REPORT

VIOLATIONS REPORT

No violations for calendar year 2020.

QUESTIONS AND INPUT

If you have any question or suggestion on how our customer service can improve, you can contact the Iowa State University Utilities office at 515-509-1529. You can also go to the Iowa State University web site at http://www.fpm.iastate.edu/utilities/water/2020.pdf where this document is located. An e-mail link mimurray@iastate.edu is provided to address questions or provide suggestions.

Other sources of drinking water information on the web are available from the following organizations:

- United States Environment Protection Agency at www.epa.gov/safewater/
- City of Ames Water and Pollution Control Department (including Ames Drinking Water Consumer Confidence Reports) at http://www.city.ames.ia.us/waterweb
- Iowa Department of Natural Resources at http://www.iowadnr.gov/InsideDNR/RegulatoryWater.aspx