CEDAR RAPIDS
City of Five Seasons®

2023
Water Quality Report

Infrastructure Updates: Investing in Our Community

To support Cedar Rapids' growth and development, the Utilities Water Department has a Capital Improvement Plan (CIP) for infrastructure updates. This plan allows staff to prioritize renovations by criticality and plan for system expansions to support the need for increased capacity. Currently, both water treatment plants have active construction work to keep the systems and infrastructure healthy and ensure capacity for the growth of the community. Updates for construction projects can be found on the Cedar Rapids Utilities Website under Protecting Water Quality: CityofCR.com/WPC.

CityofCR.com/WaterQuality

Serving the City of Cedar Rapids, the City of Robins, the Glenbrook Cove Subdivision of Marion and the Poweshiek Water Association.

Water Treatment from River to Residents

The City of Cedar Rapids obtains its drinking water supply from wells constructed in sand and gravel deposits along the Cedar River. Those deposits form an underground, water-bearing layer called an alluvial aquifer. Because of continuous pumping of the City's wells, most of the water in the aquifer is pulled from the river.

The rest of the water is supplied as water percolates up from a deeper bedrock aquifer, or down from the top of the ground. As the wells perform their work, your drinking water benefits from natural filtration through sand in the riverbank. This filtration has proven to be a beneficial pretreatment to water before it reaches the City's conventional lime-softening facilities

Water Monitoring

The City of Cedar Rapids has a continued collaboration with the United States Geological Survey (USGS) in monitoring water quality and occurrence of contaminants in the Cedar River, its tributaries, and the alluvial aquifer that supplies water to our treatment plants. Data is also being collected for ground water modeling for use in placement of new wells and prediction of water supply capacity. Results of these continued water monitoring efforts show that levels of potential drinking water contaminants remain well below levels of concern for human health. Our drinking water is highly monitored and tested, day and night throughout the year. We monitor from the water's starting point in the Cedar River, as it goes through the treatment plant and makes its way to our customers through the distribution system. The Cedar River influences the wells where we draw our water, and although no tests are required at the river level because this is not our source water, we test anyway, because fluctuations in the river impact water quality in our wells. Providing drinking water to the public is a highly regulated process, with regulations set by the Environmental Protection Agency and the Iowa Department of Natural Resources. We take our mission seriously and are very proud to provide the Cedar Rapids area with drinking water that is high quality and the best tasting water in Iowa!

SAMPLE SOURCE	NUMBER OF TESTS REQUIRED	NUMBER OF TESTS PERFORMED BY CITY
THE CEDAR RIVER	None	1,200
RAW WATER	4,000	11,000
TREATED WATER	3.2 million	3.25 million
WATER DISTRIBUTION	4,000	12,000

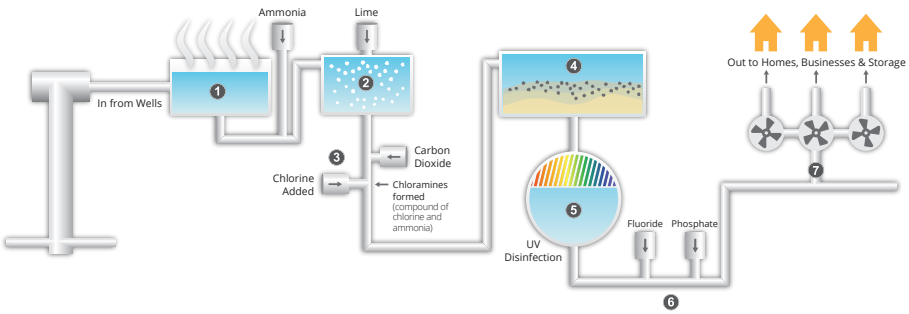
How Your Water is Treated

1 AERATION

Once water arrives at the City's treatment facilities, it undergoes a process called aeration. During this process, the raw/untreated water falls down a series of trays. These trays help open the water up so gases can be exchanged and removed. This includes the removal of undesirable gases like radon. Aeration is similar to the natural process that happens when water in a stream flows through rapids or over waterfalls.

2 SOFTENING

Lime chemical is added to soften the water. This process reduces minerals that make water "hard," and water pH increases in this process. Hardness in water means you need to use more soap and detergents. Hard water also causes buildup in water heaters and boilers. Hard water can interfere with industrial processes and sometimes gives water an unappealing taste and odor. Softening water can limit those challenges. After lime chemical is added, residual materials are extracted and applied to farmland as a soil conditioner. The residuals can also be used as fill in approved land-reclamation projects.



3 RECARBONATION AND CHLORINATION

Water pH is lowered through the addition of carbon dioxide. Chlorine is added to disinfect the water. This process helps kill disease-causing organisms, making our water safer. During this step, a trace amount of ammonia is also added to further aid in disinfection.

4 FILTRATION

Water passes through a sand and gravel filter bed, removing any remaining suspended matter.

5 UV DISINFECTION

Water enters a ultraviolet (UV) light disinfection system in this step. The UV system uses special lamps to instantly damage the genetic material of any microorganisms in the water. The process eliminates the ability for microorganisms to reproduce and cause infection. Then, water passes through a contact tank. Time spent in this tank allows the chlorine compound created in Step 3 to complete its disinfection process.

6 FLUORIDATION AND PHOSPHATE ADDITION

Fluoride promotes children's dental health. Phosphate is used to stabilize water and lessen the possibility that lead and copper will leach out of pipes and fixtures into tap water.

7 DISTRIBUTION

Finished water is pumped directly into the distribution system. The distribution system includes water storage tanks, booster stations, and more than 700 miles of water mains. Water stored in elevated tanks or pumped through booster stations helps stabilize pressure in the distribution system and serves as an emergency reserve for fire protection.

Source Water Partnership

Back in 2021, we officially launched the Cedar River Source Water Partnership (CRSWP), a partnership of communities, agencies, ag retailers, conservation organizations, and farmers to protect drinking water quality by installing nitrate removal practices on farm fields. The partnership will link cities in the Cedar River Watershed that have vulnerable drinking water supplies to their agricultural neighbors. The CRSWP will target resources to priority watersheds where nitrate levels are a concern, and will provide conservation technical assistance to farmers.

CEDAR RIVER SOURCE WATER PARTNERSHIP

The partnership received a competitively awarded funding agreement from USDA-NRCS of over $7 million in 2022 to launch the project. Project partners will contribute another $11 million in technical assistance and funding support to the project. As part of this partnership, we are working with the Iowa Department of Agriculture and Land Stewardship (IDALS) and six Soil & Water Conservation Districts to build water quality improvement practices to prevent nitrate pollution from farmland upstream of Cedar Rapids. This project is known as the "Batch & Build" because we are streamlining the process for design and construction in order to build more projects at a faster rate.

Batch & Build

The Batch & Build programs installs two types of water quality practices: bioreactors and saturated buffers, which are engineered to utilize natural microbes to remove nitrate from drainage tiles (pipes underneath farm fields). These are referred to as 'edge of field' practices because of where they are located, adjacent to the crop. As of Spring 2024, Cedar Rapids has partnered on the construction of 27 edge-of-field projects in Linn County, reducing nitrates from 1200 acres of farmland. In 2024 another 31 projects are slated for construction in the Middle Cedar Watershed.

Cedar Rapids

Proudly delivering Iowa's Best Tasting Water two years in a row.

Best Tasting WATER

2010 • 2012 • 2022 • 2023

Lead Inventory

Our drinking water contains little or no lead when it leaves our treatment plants. However, lead can leach into the water during overnight or extended contact with lead in service lines or solder and leaded-brass faucets in some homes. Because of that, the Cedar Rapids Water Division (CRWD) collects and analyzes special samples quarterly from area homes to monitor the distribution system. Our tests show that most homes are at or well below the 15 parts per billion (ppb) — or 15 micrograms per liter of water — treatment technique standard set by the Environmental Protection Agency (EPA) for annual compliance monitoring.

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 CRWD 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 and cooking. If you are concerned about lead in your water, you may have it tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available by calling the Safe Drinking Water Hotline: **1-800-426-4791** or by visiting **epa.gov/safewater/lead**.

We Need Your Help!

Because public health is our top priority, the Cedar Rapids Water Division (CRWD) is updating its records on individual service lines, which is the plumbing between the City's distribution pipes and the water meter on the customer's end. Updating records is a high priority and a first step toward determining how precise our monitoring program can be.

Help the Cedar Rapids Water Division in its efforts to remove lead service lines from the water system by taking our short survey at CityofCR.com/Inventory, or by calling 319-286-5975 for detailed instructions on how to help identify the private service line material as it enters your premise, or if there has already been or will be a replacement to your private-side service line.

What Can You Do at Home?

Cedar Rapids has been voted the best tasting water in Iowa for the 2nd year in a row by a panel of independent judges at the Iowa Section of the American Water Works Association Annual Meeting held in October 2023. How can you help to ensure you are getting the most out of your tap water? There are several things you can do to help keep your water quality at its best!

More efficient water use begins with individuals, in the home and place of work. Heating, treating, and pumping water requires chemicals and energy. When we waste less water, we conserve fuel and reduce the pollution generated by burning fuel and treating water with chemicals. Taking these and other steps and encouraging others to do so, makes good economic as well as environmental sense.

Before using water for any type of consumption after a period of stagnation, flush your cold water for 30 seconds up to 2 minutes. This can be done by doing a load of laundry, taking a shower, watering plants, or even flushing toilets. This helps to flush out any materials that may have leached into your water from home plumbing and fixtures and also brings in fresh water from the main.

Always use cold water to consume, cook with, and prepare baby formula. As water is warmed in your hot water heater, it dissolves metals from surfaces in the water heater more readily. Warm water also brings out more taste and odors and provides a warm environment where bacteria can thrive.

For fridge or other in-home filters, follow manufacturer recommendations and replacement guidelines to keep bacteria from becoming established.

Periodically remove and clean aerators and screens on faucets and fixtures. This can help keep bacteria from growing on these surfaces. It also helps to keep faucets flowing properly as naturally occurring sediment that is in pipes becomes trapped in the screens and clogs them.

Perform annual maintenance on hot water heater tanks by following manufacturers recommendations for draining and flushing. This can remove the sediment that builds up over time in the tank. Flushing can help to reduce lost efficiency of the water heater, improve water pressure, and prolong the life the of the water heater.

IN THE BATHROOM:

- Install a toilet dam or filled plastic bottle in your toilet tank.
- Install a water-efficient showerhead (2.5 gallons or less per minute).
- Take short showers and draw less water for baths.
- Choose a low flow model when buying a toilet (1.6 gallons or less per flush).
- Check your toilet for "silent" leaks by placing a food coloring in the tank and seeing if it leaks into the bowl.
- Turn off water while brushing your teeth and shaving.

IN THE KITCHEN OR LAUNDRY:

- Compost your food scraps rather than using a garbage disposal in your sink.
- Keep a gallon of drinking water in the refrigerator rather than running the tap for cold water.
- Run your washing machine with a full load of clothes. Wash with warm water instead of hot, rinse with cold water instead of warm. Wash with cold water when you can. If possible, hang your wash out to dry.

WHAT'S IN OUR WATER?

PFAS and Nitrate Monitoring in Action

NITRATES

How does nitrate end up in our water?
Nitrate is a dissolved form of nitrogen found in fertilizers and sewage byproducts that may leach into groundwater and other water sources. Nitrates occur naturally in some waters. Over time, nitrates can accumulate in aquifers and contaminate groundwater.

Why is this important?
When present at elevated concentrations, nitrates are harmful to human health and have been linked to different types of cancers and thyroid disease. Nitrate levels tend to be higher in the spring and early summer during periods of rain and agricultural activities. Levels of nitrate levels in the City's drinking water have never violated the legal safety limit of 10 ppm, and the city continuously monitors levels to ensure safety. If levels exceed 10 ppm, the city will notify all users of the potential health risk particularly for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. If you are caring for an infant, ask for advice from your health care provider.

PFAS

Per- and Polyfluoroalkyl substances (PFAS) are also a group of substances that are becoming of increasing concern in drinking water. PFAS have been used in a variety of industries around the globe since the 1940s. When present, the chemicals are very persistent in the environment and in the human body, meaning they don't break down and can accumulate over time. Due to their persistence and wide use over the last several decades, they are now making their way into bodies of water and groundwater sources and becoming a contaminate of concern for the drinking water industry. While primary human exposure is from several common household items: non-stick surfaces, waterproofing, grease-resistant coatings, stain-resistant coatings, cosmetics, and firefighting foams, we are diligently monitoring our city's water for PFAS levels. This ongoing monitoring is being performed by the Cedar Rapids Water Division (CRWD). Monitoring includes sampling of the groundwater source wells and the drinking water supply.

The Environmental Protection Agency (EPA) is performing research and has set Maximum Contaminant Levels for six (6) PFAS specific compounds. The CRWD has not had any detections in its treated drinking water thus far for these compounds. The CRWD took part in the EPA's Unregulated Contaminant Monitoring Rule (UCMR) program's fifth round of sampling in 2023. The program tested for 29 PFAS compounds and this testing will continue quarterly. For more information on PFAS, visit CityofCR.com/PFAS or epa.gov/pfas.

AT-RISK POPULATIONS

It's important to be aware that some people may be more vulnerable than the general population to contaminants in drinking water. Immuno-compromised persons — those undergoing cancer chemo-therapy or organ transplants, some elderly or infants and people with HIV/AIDS or other immune system disorders — can be particularly at risk from infections.

We ask anyone that may be at risk to seek advice about drinking water from their health care providers. Guidelines from the EPA and Centers for Disease Control on appropriate steps to lessen the risk of infection by microbial contaminants and/or Cryptosporidium are available from the National Safe Drinking Water Hotline at 1-800-426-4791.

Have Any Questions?

If you have questions or concerns about our water quality or this report, we invite you to attend one of two upcoming public meetings.

RESIDENT APPRECIATION DAY

WHERE: Downtown Farmers' Market
WHEN: Saturday, June 1, 2024
TIME: 7:30 AM–Noon

GENERAL PUBLIC MEETING

WHERE: Water Administration Building
WHEN: Thursday, June 6, 2024
TIME: 4 PM–5 PM

Careers in Water

Working in the water sector has many different vantage points. Essential roles such as water plant maintenance, plant operators, or water main construction crew members work around the clock to ensure there is a reliable, adequate supply of safe drinking water for all community members. A high school diploma or GED is the only requirement for these positions. Other positions such as managers and engineers help to align resources for solving issues and removing barriers experienced by treatment plant staff or construction crews now and into the future. These positions typically require a four-year degree in civil/environmental engineering or management, or related fields.

Cedar Rapids Community Water Academy

In October 2023 Cedar Rapids Utilities hosted the inaugural session of Community Water Academy to educate and inform community members about the work we do. The course was four sessions and included topics such as watersheds/source water, drinking water treatment, sanitary and stormwater collection systems, waste water treatment, and the flood control system. Each topic included a respective tour to see firsthand what happens with each step. Look for more information this summer about the next session to be held in October.

Water Quality Findings

This table summarizes required water quality monitoring results for regulated parameters that were detected in the 2023 calendar year. A comprehensive report of all water quality testing is available from the Water Division.

WATER TREATMENT PLANTS - FINISHED WATER

INORGANIC CHEMICALS	UNITS	MCL	MCLG	VIOLATION	J AVE. PLANT RANGE	J AVE. PLANT REPORTED	NW PLANT RANGE	NW PLANT REPORTED	SOURCE OF CHEMICAL
Arsenic	µg/L	10	0	NO	ND - 1.8	1.0	ND - 0.9	0.5	Erosion of natural deposits; Run-off from orchards; Run-off from glass and electronics production wastes
Nitrate	mg/L	10	10	NO	0.2 -4.4	4.4	0.3 - 5.7	5.7	Run-off from fertilizer use; Leaching from septic tanks, Sewage; Erosion of natural deposits
Nitrite	mg/L	1	1	NO	ND - 0.1	0.1	ND - 0.1	0.1	Run-off from fertilizer use; Leaching from septic tanks, Sewage; Erosion of natural deposits
Sodium	mg/L	NA	NA	NO	NA	18	NA	18	Erosion of natural deposits; Added to water during treatment process
Fluoride	mg/L	4	4	NO	0.2 -0.8	0.8	0.3 - 0.8	0.8	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
ORGANIC CHEMICALS					RANGE	REPORTED	RANGE	REPORTED	
Atrazine	µg/L	3	3	NO	ND - 0.2	0.1	ND - 0.2	0.1	Run-off from herbicide used on row crops
TREATMENT TECHNIQUE INDICATORS					RANGE	REPORTED	RANGE	REPORTED	
Total Organic Carbon	Removal Credits	TT	NA	NO	0.9 - 2.5	1.9	1.1 - 3.3	2.1	Naturally present in the environment
					Running Annual Average TOC Credits must be > 1.0				
Turbidity	NTU	TT	NA	NO	0.02 - 0.27	0.27	0.03 - 0.15	0.15	Soil run-off
	Cannot exceed 1.0 NTU & Monthly no more than 5% > 0.3 NTU				% > 0.3 NTU		% > 0.3 NTU		
					0%		0%		

UNREGULATED AND SECONDARY CHEMICALS

INORGANIC CHEMICALS	UNITS	MCL	MCLG	J AVE. PLANT RANGE	J AVE. PLANT AVG	NW PLANT RANGE	NW PLANT AVG	SOURCE OF CHEMICAL
Chloride	mg/L	NA	250	30.6 - 43.9	35.5	27.6 - 39.8	33.8	Erosion of natural deposits, Run-off
Copper	mg/L	NA	1.0	ND - 0.005	0.003	ND - 0.014	0.008	Corrosion of household plumbing, Erosion of natural deposits
Iron	mg/L	NA	0.3	0.04 - 0.10	0.06	0.03 - 0.12	0.07	Corrosion of household plumbing, Erosion of natural deposits
Manganese	µg/L	NA	50	5.0 - 39.6	16.0	ND - 11.1	0.4	Corrosion of household plumbing, Erosion of natural deposits
Sulfate	mg/L	NA	250	19.5 - 42.0	28.4	25.9 - 41.8	31.0	Erosion of natural deposits
Zinc	mg/L	NA	5	0.04 - 0.22	0.19	0.04 - 0.25	0.21	Corrosion of household plumbing, Erosion of natural deposits
ORGANIC CHEMICALS				RANGE	AVG	RANGE	AVG	
Chloroform	µg/L	NA	70	1.3 - 2.3	1.6	1.5 - 2.5	2.1	By-product of drinking water disinfection
Bromodichloromethane	µg/L	NA	0	ND - 0.8	0.2	ND - 0.8	0.4	
Dichloroacetic Acid	µg/L	NA	0	2 - 3	2.2	NA	2.0	
Metolachlor	µg/L	NA	NA	ND - 0.2	0.17	ND - 0.2	0.18	Run-off from fertilizer used on row crops
RADIONUCLIDES				RANGE	REPORTED	RANGE	REPORTED	
Radon	pCi/L	NA	NA	48 - 72	62	26 - 46	34	Erosion of natural deposits

DISTRIBUTION SYSTEM MONITORING

LEAD AND COPPER RULE	UNITS	ACTION LEVEL (AL)	MCLG	VIOLATION	RANGE	90TH PERCENTILE	95TH PERCENTILE	SAMPLES EXCEEDING AL	SOURCE OF CHEMICAL
Lead	µg/L	15	0	NO	ND - 46.3	5.6	13.1	3	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	mg/L	1.3	1.3	NO	ND - 0.14	0.06	0.05	0	

REVISED TOTAL COLIFORM RULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Total # Samples/Month	108	131	135	128	121	129	131	130	131	140	133	132
Number of Positive Coliform Samples/Month	0	0	0	0	0	0	1	1	0	0	0	1
Level 1 Assessment Required	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Meets Monthly MCL of <5% Positive Coliform/Month	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

INORGANIC CHEMICALS	UNITS	MRDL	MRDLG	VIOLATION	RANGE	REPORTED	SOURCE OF CHEMICAL
Nitrite	mg/L	1	1	No	ND - 0.10	0.1	Run-off from fertilizer use; Leaching from septic tanks, Sewage; Erosion of natural deposits

DISINFECTANT & DISINFECTION BY-PRODUCTS	UNITS	MRDL	MRDLG	VIOLATION	DISTRIBUTION SYSTEM RANGE	DISTRIBUTION SYSTEM REPORTED	
Total Chlorine Residual	mg/L	4	4	NO	2.1 - 3.8	3.2	Water additive used to control microbial growth
	UNITS	MCL	MCLG	VIOLATION	RANGE	REPORTED	
Total Trihalomethanes (TTHM)	µg/L	80	NA	NO	2.2 - 3.9	3.2	By-product of drinking water disinfection

**Highest Locational Running Annual Average at Site DB03*

Source Water

Source Water Assessment Information: This water supply obtains its water from the sand and gravel of the Alluvial aquifer of the Cedar River. The Alluvial aquifer was determined to be highly susceptible to contamination because the aquifer characteristics and the overlying materials provide little protection from contamination at the land surface. The Alluvial wells will be highly susceptible to surface contaminants such as leaking underground storage tanks, contaminant spills, and excess fertilizer applic ation. A detailed evaluation of the source water supply was completed by the IDNR, and is available by contacting the public water supply at 319-286-5975. *Information about work being done to help minimize contamination of the source water supply can be found at **CityofCR.com/MCPP**.*

	Arsenic µg/L	Total Coliform cfu/100ml	E.coli cfu/100ml	Lead µg/L	Copper µg/L	Zinc µg/L	Manganese µg/L	Iron µg/L	Sodium mg/L	Nitrate mg/L	Radon pCi/L	TOC mg/L
2019 Annual Average	0.86	55	<1	ND	6.6	2.7	120	42.7	9.4	3.6	245	2.87
2020 Annual Average	1.40	2	<1	ND	7.1	0.9	120	289.3	10.2	3.3	297	1.57
2021 Annual Average	2.69	4	<1	0.01	9.5	3.2	479	310.0	13.0	2.0	295	1.47
2022 Annual Average	1.00	4	<1	0.01	7.8	3.8	310	410.0	12.8	3.2	266	2.38
2023 Annual Average	1.45	16	<1	ND	23.4	5.19	252	311.0	12.9	2.0	286	3.20

ACRONYMS

AVG: Average
ND: Not Detected
MRDL: Maximum Residual Disinfectant Level
NR: Not Regulated
mg/L: Milligrams per liter or parts per million
µg/L: Micrograms per liter or parts per billion
pCi/L: Picocuries per liter
cfu/mL: Colony-forming unit per milliliter
MCL: Maximum Contaminant Level
MCLG: Maximum Contaminant Level Goal
NA: Not Applicable
NTU: Nephelometric Turbidity Unit
MRDLG: Maximum Residual Disinfection Level Goal
HLRAA: Highest Locational Running Annual Average
RAA: Running Annual Average

An important message from the Environmental Protection Agency:

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. That's because as the water we draw from — lakes, rivers, streams, ponds, reservoirs, springs and wells — travels over the surface of the land or through the ground, it picks up naturally occurring minerals and, in some cases, radioactive material. It can also pick up substances resulting from the presence of animals or from human activity. 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 at 800-426-4791 or visiting the website at www.epa.gov/ogwdw. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses and parasites, which can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Frequently Asked Questions

What is the fluoride concentration, and why is it added?

Fluoride is added during the treatment process to help prevent dental cavities. The optimal concentration is maintained at 0.7 parts per million (ppm) with a range of 0.6-0.9 ppm as recommended by the U.S. Department of Health and Human Services.

My toilet tank and inside of my dishwasher are stained dark brown to black. Is my water safe to drink?

The dark staining is likely due to the corrosion-control chemical added during treatment. Its purpose is to lay a protective coating on the insides of pipes so water never comes in contact with the pipe, thereby reducing the risk of dissolving lead or copper into the drinking water. It has been tested extensively and no health or safety concerns have been identified.

My water throughout the entire house tastes and smells musty or stale.

Sometimes in low-use areas or dead-end main areas, the water does not get circulated as it should. Where this is the case, the distribution crew can be notified to flush hydrants in the area to help bring in fresh water.

The water is discolored yellow or cloudy/milky. Does this mean it is unsafe?

Discoloration of water as light brown or yellow is a result of maintenance and flushing activity. Natural sediment gets stirred up and will clear as it settles. Milky, cloudy, or white water, especially if it clears from the bottom up when put in a glass, is an indication that air has gotten into the plumbing and is not harmful. A thorough flush of two or three cold water taps at the same time for a few minutes can help release the trapped air. Sediment and discoloration will clear as it has time to settle back out. If the discoloration remains, staff can be notified to flush the water mains in the area.

Why is there slimy pink or orange stuff in my water or on a surface near water?

This is a common occurrence, stemming from an airborne organism that collects on moist surfaces and forms growing colonies, usually around drains, toilets, sink fixtures, pet water dishes, showers, and shower curtains. This substance does not pose any additional health risks, given that it is already found in the air we breathe. The best way to reduce the growth of these organisms is to use cleaners that contain bleach.

Why is my household water filter brown?

Due to the age of the Cedar Rapids water system, the Iowa Department of Natural Resources requires the Cedar Rapids Water Division (CRWD) to have a corrosion control process. This is a chemical addition that prevents the leaching of lead, copper, and other metals from water pipes and fixtures. Zinc-orthophosphate is continuously added in very low doses to form a protective coating on the inside of pipes, service lines, and household plumbing. This coating keeps lead and copper levels low. However, this process can also turn filters brown and cause filters to last a shorter length of time than advertised CRWD treats water with a softening process, eliminating the need for water softeners. We also meet or exceed all state and federal regulations, which eliminates many of the reasons to use a home filtration system.

What should I expect if my water is shut off due to a water main break?

Water main breaks are often indicated by a lack of water at the tap or water bubbling to the surface of neighborhood streets. This may prompt a water service disruption to your home or business.

Repair crews attempt to reach all homes, businesses, and apartments prior to shutting off water, except in emergencies. Crews leave a door hanger at the property which explains what to do if water is shut off. It generally takes repair crews 8-12 hours to fix a break and restore water service. If air or particles are coming out of your drinking tap, run water for several minutes to flush the line.

If you receive a precautionary boil advisory notice, follow these steps before consuming tap water: **1)** Bring water to a boil, **2)** Let water boil rapidly for at least one minute, **3)** Allow to completely cool before consuming, **4)** Check City website for advisory status updates, or call Water Customer Service at **319-286-5900**.

If precautionary advisories are in place, bacteria testing will be done. In most cases, it takes two days for a bacterial contamination sample to return. If the sample shows no contamination in the water, another information sheet is issued, indicating an All Clear. Information will be posted to the City's website (**CityofCR.com**) if a precautionary boil advisory notice is issued.

2023 WATER REPORT SHOWS

100% COMPLIANCE

The Water division achieved 100% compliance with the Iowa Department of Natural Resources' water quality expectations in 2023. This marks the sixth consecutive year the division earned this distinction. Additionally, the Water Pollution Control Facility (WPC) must meet 7,640 points of compliance toward its water discharge permit each year. In 2022, WPC became eligible for the North American Clean Water Agency (NACWA) Silver Peak Performance Award for its exceptional compliance. Cedar Rapids residents can be proud of the exceptional standards upheld by their Utilities Department every day.

QUESTIONS?

If you have questions or concerns about our water quality or this report, please contact Water Division Customer Service. We are happy to help identify issues and resolve your concerns.

319-286-5900

watermail@cedar-rapids.org

Glossary

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

Arsenic: The EPA recently lowered the arsenic Maximum Contaminant Level (MCL) to 10 ppb. Trace amounts of arsenic are occasionally detected in your drinking water at levels well below this more stringent standard. Arsenic is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Coliform: A bacteria originating in the digestive system of mammals. Its presence in water alerts lab technicians that disease-causing agents may be present.

Colony-forming unit: Where a colony of microbes grow on a petri dish, form one single microbe.

Compliance: Following all rules and regulations defined in the Safe Drinking Water Act and maintaining water quality below MCLs.

Contaminant: One of a variety of natural or man-made physical, chemical, biological or radiological substances whose presence in public water systems may cause adverse health effects to consumers.

Detection: The positive identification of the presence of a particular contaminant. Detection of a contaminant does not necessarily represent a serious health risk to consumers if the concentration is below the MCL.

Disinfection: Killing the larger portion of microorganisms in water, with the probability that the disinfecting agent kills all disease-causing bacteria.

Drought: A period of unusually persistent dry weather that persists long enough to cause serious problems such as crop damage and/or water supply shortages.

Filtration: A treatment process that physically removes particles from water as the water passes through a medium.

Groundwater: The supply of fresh water found beneath the earth's surface, usually in aquifers. Groundwater is often used to supply wells and springs.

Herbicide: A chemical agent used to kill plants, especially weeds. Used widely in agriculture.

Highest Locational Running Annual Average (HLRAA): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

Immunocompromised: A physical condition in which the human immune system becomes less capable of warding off illness or infection.

Inorganic: Composed of or involving organisms (or their remains or products) that are not living. Examples of inorganic substances include minerals, rocks and salt.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goals (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.

Maximum Residual Disinfection 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.

Maximum Residual Disinfection Level Goal (MRDLG): The level of 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.

Microbial: A group of microorganisms such as bacteria, protozoa and viruses.

Nephelometric Turbidity Unit (NTU): A unit of measure used to determine the clarity of drinking water.

Organic: Of, pertaining to or derived from living organisms. Organic matter contains carbon, hydrogen and oxygen. Examples include humans, plants and animals.

Particulates: Of or relating to minute separate particles.

Pesticides: Any substance or chemical applied to kill or control pests, including weeds, insects, algae, rodents and other undesirable agents.

Radionuclides: Naturally occurring and human-made radionuclides are present throughout the environment. They are found in varying amounts in soil, water, indoor and outdoor air — and even within our bodies — making exposure inevitable. State and Federal regulations establish safe drinking water maximum contaminant levels for a variety of radionuclides. Monitored contaminants include Gross Alpha Radiation, Radium-226, Radium-228, and Combined Radium radionuclides. The existing treatment process does not reduce or remove these contaminants. Except in extreme circumstances, radiation resulting from the ingestion of radionuclides in drinking water is far lower than radiation resulting from other sources of exposure, like radon found in some basements. Radon is a radionuclide classified as an unregulated contaminant. During the aeration treatment stage, radon can be removed from the water source. Additional information about Radon and aeration is included in this report. The concentration of radionuclides found in our water is well within safe regulatory guidelines.

Radon: Radon is a radioactive gas that you can't see, taste or smell. It is found throughout the United States. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also increase the risk of stomach cancer. Radon can build up to high levels in all types of homes. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can also be released into indoor air from tap water when showering, washing dishes, and performing other household activities. A radon level less than 4 picocuries per liter of air (pCi/L) is considered safe. Between 0.0019 – 0.0070 pCi/L of radon may enter the air from City tap water — far less than radon entering homes through the foundation. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy.

For additional information, call your state radon program (800-838-5992) or the EPA's Radon Hotline (800-767-7236).

Running Annual Average (RAA): An average of sample analytical results for samples taken during the previous four calendar quarters.

Surface water: All water naturally open to the atmosphere and all springs, wells or other collectors that are directly influenced by surface water. Water located close to the earth's surface.

Total Organic Carbon (TOC): Amount of carbon found in an organic compound; used as an indicator of water quality.

Revised Total Coliform Rule (RTCR): Revised compliance rule that aims to increase public health protection through reduction of pathways for contamination; find-fix-document.

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

Turbidity: Turbidity is a measure of the cloudiness of water. Turbidity is a good indicator of treatment filter performance and is regulated as a Treatment Technique.

Violation: Exceeding the MCL of a contaminant regulated by the federal government; failure to properly monitor or report regulated contaminants would also be considered a violation.