# Charleston Consumer Confidence Report 2025

# **Spanish (Espanol)**

Este informe contiene informacion muy importante sobre la calidad de su agua beber. Traduscalo o hable con alguien que lo entienda bien.

# Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

### Do I need to take special precautions?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

#### Where does my water come from?

Charleston Side Channel Reservoir intake (01670) and the Embarrass River intake (01680).

#### Source water assessment and its availability

The Source Water Assessment is available online at <u>https://dataservices.epa.illinois.gov/swap/factsheet.aspx</u>

### Why are there contaminants in my drinking water?

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 and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and 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:

microbial contaminants, such as viruses and bacteria, that 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 a variety of sources such as agriculture, urban storm water runoff, and residential uses; organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

#### How can I get involved?

Charleston City Council meetings take place in the Council Chambers at City Hall the first and third Tuesday of every month. Council Agendas are available at www.charlestonillinois.org. In addition, questions and concerns can be addressed to the Water Treatment Plant Superintendent by phone or email at (217) 345-2977 or Stewart.Trevor@co.coles.il.us.

# **Description of Water Treatment Process**

Your water is treated in a "treatment train" (a series of processes applied in a sequence) that includes coagulation, flocculation, sedimentation, filtration, and disinfection. Coagulation removes dirt and other particles suspended in the source water by adding chemicals (coagulants) to form tiny sticky particles called "floc," which attract the dirt particles. Flocculation (the formation of larger flocs from smaller flocs) is achieved using gentle, constant mixing. The

heavy particles settle naturally out of the water in a sedimentation basin. The clear water then moves to the filtration process where the water passes through sand, gravel, charcoal or other filters that remove even smaller particles. A small amount of chlorine or other disinfection method is used to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water before water is stored and distributed to homes and businesses in the community.

# Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit <u>www.epa.gov/watersense</u> for more information.

# **Cross Connection Control Survey**

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

# **Source Water Protection Tips**

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

# Monitoring and reporting of compliance data violations

During the monitoring period of Oct.-Dec. of 2023 we failed to submit the required sample results for bromate to the Illinois Environmental Protection Agency (IEPA) within the 10-day reporting window, as required by the U.S. Environmental Protection Agency (EPA) regulations. This was a reporting violation-not a water quality violation. There is no immediate risk to your health. Had there been a health risk, you would have been notified immediately.

However, because we did not report the bromate sample results in time, we cannot be certain of the water quality during that period based on those samples alone. Please be assured that when the samples were analyzed, bromate levels were within safe drinking water limits, and no violation of the maximum contaminant level (MCL) occurred.

In addition to this we failed to provide you, our drinking water customers, an annual report in 2024 that adequately informed you about the reporting violation of the bromate sample results outlined above.

# **Additional Information for Lead**

The system inventory includes lead service lines. The Lead Service Inventory and Replacement Plan is accessible at https://www.charlestonillinois.org/departments/public\_works/lead\_service\_line\_inventory\_and\_ plan.php

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. CHARLESTON is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact CHARLESTON (Public Water system Id: IL0290100) by calling 217-345-8458 or emailing AsstPWD@co.coles.il.us. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead.

# Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

			Detect	Range					
Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	In Your Water	Low	High	Sample Date	Violation	Typical Source	
Disinfectants & Dis	Disinfectants & Disinfection By-Products								
(There is convincing contaminants)	evidence	that ad	dition of	a disir	nfectan	t is neces	ssary for co	ntrol of microbial	
Bromate (ppb)	00	10	1	NA	NA	2024	No	By-product of drinking water disinfection	
Chloramine (as Cl2) (mg/L)	4	4	1.8	1	2.4	2024	No	Water additive used to control microbes	
Haloacetic Acids (HAA5) (ppb)	NA	60	10	6.4	13.63	2024	No	By-product of drinking water chlorination	
TTHMs [Total Trihalomethanes] (ppb)	NA	80	21	8.26	26.3	2024	No	By-product of drinking water disinfection	
Inorganic Contaminants									
Barium (ppm)	2	2	0.017	NA	NA	2024	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	

			Detec		ct	Range							
Contaminants	MCL or MRD	_	MCL, TT, or MRDL	In You Wate	-	Low	Hig		Sample Date	Violatio	n T	ypical Source	
Fluoride (ppm)	4		4	0.7	(	).742	0.74	12	2024	No	deposi which   teeth; l	n of natural ts; Water additive promotes strong Discharge from er and aluminum es	
Nitrate [measured as Nitrogen] (ppm)	10		10	1		NA	NA		2024	No	Leachir tanks, s	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
Sodium (optional) (ppm)	NA			0.016		NA	NA		2024	No		Erosion of natural deposits; Leaching	
Contaminants	MCLG	AL	90 Perce		Range Low Hig		E		amples eeding AL	Sample Date	Exceeds AL	Typical Source	
Inorganic Contami	nants												
Copper - action level at consumer taps (ppm)	1.3	1.3	0.0	0.089		3 11	0		0	2023	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Lead - action level at consumer taps (ppb)	00	15	2.	7	NC	) 4	9		1	2023	No	Corrosion of household plumbing systems; Erosion of natural deposits	

# Violations and Exceedances

# **Undetected Contaminants**

The following contaminants were monitored for, but not detected, in your water.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL		Violation	Typical Source
Arsenic (ppb)	0	10	ND		Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Selenium (ppb)	50	50	ND	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines

Unit Descriptions						
Term	Definition					
ppm	ppm: parts per million, or milligrams per liter (mg/L)					
ppb	ppb: parts per billion, or micrograms per liter (µg/L)					
mg/L	mg/L: Number of milligrams of substance in one liter of water					
NA	NA: not applicable					
ND	ND: Not detected					
NR	NR: Monitoring not required, but recommended.					

Important Drinking Water Definitions								
Term	Definition							
MCLG	MCLG: Maximum Contaminant Level Goal: 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.							
MCL	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.							
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.							
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.							
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.							
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.							
MRDL	MRDL: Maximum residual disinfectant level. 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.							
MNR	MNR: Monitored Not Regulated							

Important Drinking Water Definitions						
MPL	MPL: State Assigned Maximum Permissible Level					
90th Percentile	Compliance with the lead and copper action levels is based on the 90th percentile lead and copper levels. This means that the concentration of lead and copper must be less than or equal to the action level in at least 90% of the samples collected.					

For more information please contact:

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