

# 2024 WATER QUALITY REPORT FOR CHARLES CITY WATER SUPPLY

This report contains important information regarding the water quality in our water system. The source of our water is groundwater. Our water quality testing shows the following results:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)			
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	3.00 (3 - 3)	09/30/2024	No	By-products of drinking water chlorination
Copper (ppm)	AL=1.3 (1.3)	90th	0.0349 (0.0031 - 0.103)	2022	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15 (0)	90th	4.20 (ND - 13)	2022	No	Corrosion of household plumbing systems; erosion of natural deposits
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.9 (1.52 - 2.3)	12/31/2024	No	Water additive used to control microbes
04 - S/EP WELLS 5,7,8 @ PLANT (TREATED)						
Barium (ppm)	2 (2)	SGL	0.062 mg/L	01/05/2022	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4 (4)	SGL	0.5 mg/L	01/05/2022	No	Erosion of natural deposits; Discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth; <b>The City of Charles City does not add fluoride to drinking water.</b>
Sodium (ppm)	N/A (N/A)	SGL	4.92	01/05/2022	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	<0.10 mg/L	04/04/2024	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite [as N] (ppm)	1 (1)	SGL	<0.60 mg/L	04/04/2024	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Combined Radium	5 (N/A)	SGL	<1.0 pCi/L	04/06/2021	No	Erosion of natural deposits
Volatile Organic Compounds	0.2 - 700 (ND - 700)	SGL	<0.50 ug/L	01/29/2024	No	Runoff from industrial sites, herbicides, petroleum sites, insecticides, and PVC factories
2, 4-D (mg/L)	0.07 (0.07)	SGL	<0.002 mg/L	01/23/2024	No	Runoff from industrial sites, herbicides, petroleum sites, insecticides, and PVC factories
PFOA (ppt)	4 (0)	SGL	ND	06/01/2024	No	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain fire fighting activities

PFOS (ppt)	4 (0)	SGL	ND	06/01/2024	No	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain fire fighting activities
PFHxS (ppt)	10 (10)	SGL	ND	06/01/2024	No	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain fire fighting activities
PFNA (ppt)	10 (10)	SGL	ND	06/01/2024	No	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain fire fighting activities
HFPO-DA (ppt)	10 (10)	SGL	ND	06/01/2024	No	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain fire fighting activities

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

## 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.
- ppb -- parts per billion.
- ppm -- parts per million.
- pCi/L – picocuries per liter
- N/A – Not applicable
- ND -- Not detected
- RAA – Running Annual Average
- 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

## 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 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 infection 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. CHARLES CITY WATER SUPPLY 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>.

Our water supply has completed a service line inventory. The most up to date inventory can be accessed online at: <https://charlescitygis.integritygis.com/H5/Index.html?viewer=charlescity#> If the icon on your house/business is white, please contact us with a time that works for us to gain access to the basement so that we can update your service line material. There is no charge for this.

#### **SOURCE WATER ASSESSMENT INFORMATION**

This water supply obtains its water from the dolomite and limestone of the Devonian aquifer. The Devonian aquifer was determined to be highly susceptible to contamination because the characteristics of the aquifer and overlying materials provide little protection from contamination at the land surface. The Devonian wells will be highly susceptible 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 Water Department at 641-257-6315.

#### **OTHER INFORMATION**

Decisions pertaining to the public water supply are made at City Council meetings held on the 1st<sup>st</sup> and 3rd Mondays of each month at 6:00 p.m. in the council chambers at City Hall; these meetings are open to the public.

For more information on meeting minutes and the City's Water Department, please visit the City's website at: <http://www.cityofcharlescity.org>

You may pick up a printed copy of the Consumer Confidence Report at any of the following locations during normal working hours:  
CITY HALL BUSINESS OFFICE: 900 Clark St. 641-257-6300

CHARLES CITY PUBLIC LIBRARY: 910 Clark St. 641-257-6319

CHARLES CITY WATER DEPARTMENT: 1709 INDIANA AVE. 641-257-6315

This Consumer Confidence Report, as well as previous reports, may be viewed and downloaded at: <https://www.cityofcharlescity.org/Archive.aspx?AMID=36>

#### **CONTACT INFORMATION**

For questions regarding this information or any other questions regarding the water system, please contact the Charles City Water Department at 641-257-6315 during regular working hours of 7:00 am to 3:30 pm, Monday through Friday.  
Or email: [cory@cityofcharlescity.org](mailto:cory@cityofcharlescity.org) with any questions or concerns.

**PLEASE NOTE: THIS REPORT WILL NOT BE MAILED TO INDIVIDUAL CUSTOMERS**