

# *Annual Drinking Water Quality Report For 2022*

*Cedar Ridge Children's Home & School, Inc.*

*PWSID 0210020*

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We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the water quality and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is from four wells located on the Cedar Ridge property which draw from underground aquifers at varying depths from 400 feet to 525 feet. From the wells, the water is chlorinated and stored in a 5,800 gallon storage tank. It is then treated by a water softener system, UV light, and a filter system that removes microbes to provide safe drinking water. This filter removes cysts and other harmful organisms.

We have a source water protection plan available from our office that provides more information such as potential sources of contamination. This plan is also available from Maryland Department of the Environment (MDE) and the Caroline County Public Library. For more information call 1-800-633-6101.

This report shows our water quality and what it means. If you have any questions about this report or concerning your water, please contact Paula Shatzer, Chief Operations Officer, at 301-582-0282. We want our residents, employees, and students to be informed about their water. A Source Water Assessment is available From MDE.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Cedar Ridge Children's Home routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2022. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

- *Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- *Parts per billion (ppb) or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- *Parts per trillion (ppt) or Microgram per liter*- one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- *Action Level* - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- *Maximum Contaminant Level* - The "Maximum Allowed" (MCL) is 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* - The "Goal"(MCLG) is 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.
- *Nephelometric Turbidity Unit (NTU)* - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

- *Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Disinfection and Disinfection By-Products</b>						
TTHM (Distribution) [Total trihalomethanes] Range Highest Level Detected (2022)	N	3.9-3.9 4	ppb	0	80	By-product of drinking water disinfection
HAA5 (Haloacetic acids) (distribution) Range Highest Level Detected (2022)	N	2.8-2.8 3	ppb	0	60	By-product of drinking water disinfection
Chlorine (2022)	N	1.5	ppm	4	4	Water additive used to control microbes
<b>Microbiological Contaminants</b>						
Turbidity Lowest monthly % meeting limit Highest single measurement	N	100% 0.2	ntu	n/a	TT 1 5	Soil runoff
<b>Inorganic Contaminants</b>						
Barium (2022)	N	0.043	ppm	2	2	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits
Nitrate (measured as Nitrogen) (2022)	N	5	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits
Nitrite (measured as nitrogen) (2021)	N	0.00692	ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage, Erosion of natural deposits
Copper (2021) (Distribution)	N	0.288	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Fluoride (2022)	N	0.4	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Radioactive Contaminants</b>						
Alpha emitters (2017)	N	2	pCi/l	0	15	Erosion of natural deposits
Combined radium (2017) (226 & 228)	N	1.6	pCi/l	0	5	Erosion of natural deposits

Note: Test results are for year 2022 unless noted otherwise; testing for all contaminants is not required annually.

We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at these levels.

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. Cedar Ridge Childrens Home. 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 Cedar Ridge Childrens Home at 301-582-0282. 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>.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

PFAS – or per- and polyfluoroalkyl substances – refers to a large group of more than 4,000 human-made chemicals that have been used since the 1940s in a range of products, including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging and fire-fighting foams. These uses of PFAS have led to PFAS entering our environment, where they have been measured by several states in soil, surface water, groundwater, and seafood. Some PFAS can last a long time in the environment and in the human body and can accumulate in the food chain.

Beginning in 2020, the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. Our water system was not tested for PFAS in 2022. In March 2023, EPA announced proposed Maximum Contaminant Levels (MCLs) of 4 ppt for PFOA and 4 ppt for PFOS, and a Group Hazard Index for four additional PFAS compounds. Future regulations would require additional monitoring as well as certain actions for systems above the MCLs. EPA will publish the final MCLs and requirements by the end of 2023 or beginning of 2024. Additional information about PFAS can be found on the MDE website: [mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx](https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx)

Nitrate [measured as Nitrogen] - 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.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

The Maryland Rural Water Association's State Circuit Rider assisted with the completion of this report.

### **Violation**

**LEAD AND COPPER REPORT Began 10/10/2021- 9/29/2022. We failed to submit our report to MDE within 10 days after the end of the monitoring period. The report was due to MDE by 10/01/2021, and the report was received by MDE on 9/29/2022.**

Please call Paula Shatzer at 301-582-0282 if you have any questions about this report.