2024
Annual Drinking Water Quality Report
Ellenwood Community – MD0080057
Charles County, Maryland
Prepared by the Department of Public Works
Utilities Division

We are pleased to present the Annual Drinking Water Quality Report for the Ellenwood Community for the period of January 1, 2024, through December 31, 2024. This report informs you about the quality of the water and services we deliver to you every day. This report is provided in compliance with Federal regulations and is updated annually.

Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to protecting water resources, improving the water treatment process, and ensuring the quality of your water meets or exceeds all local, State, and Federal standards and regulations. We are confident the drinking water from the Ellenwood system is safe and meets all Federal and State requirements. A source water assessment was performed by MDE and is available on their website, mde.maryland.gov

Usted puede obterner esta información en español, llamando al Departamento de Obras Públicas División de Utilidades en 301-609-7400.

The source of the drinking water for the Ellenwood system is the Upper Patapsco aquifer. An aquifer is an underground reservoir or deposit of water that is tapped by drilling wells and pumping the water to the surface for distribution. The earth between the surface and the underground aquifer helps to purify the water, making it easier to treat the water supply before it is pumped into the water distribution system. The Ellenwood system is served by 2 wells.

Water source	Type of Water
ELLENWOOD 1 CH920946	Ground Water
ELLENWOOD 2 (SAND, TBD) CH731991	Ground Water

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade, such as microbes, inorganic or organic chemicals, and radioactive substances. 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 EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. The elderly, infants, and immunocompromised persons, such as persons with cancer who are undergoing chemotherapy, persons who have undergone organ transplants, people with Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) or other immune system disorders, can be at a

higher risk of infection from contaminates. These people should seek advice about drinking water from their health care providers. The Environmental Protection Agency/Center for Disease Control (EPA/CDC) guidelines to reduce the risk of infection are available from the Safe Drinking Water Hotline at 1-800-426-4791.

The Department of Public Works, Utilities Division, routinely monitors the Ellenwood system for contaminants in your drinking water according to Federal and State laws. The following table shows the results of our monitoring efforts and identifies the year a contaminant was tested. The results of testing for contaminants which are not regulated are listed in the Unregulated Contaminants section. Definitions of key terms are presented below the table.

Ellenwood System

Test Results						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Major Source in Drinking Water
Disinfectants and Disinfection By-Products						
Chlorine (2024)	N	0.41 – 2.03	ppm	MRDLG 4	MRDL 4	Water additives to control microbes
Highest Detected Chlorine (2024)	N	2.03	Ppm	4	4	Water additives to control microbes
TTHMS [Total Trihalomethanes] Distribution (2023)	N	2.9	ppb	No Goal for the total	80	By product of drinking water chlorination
HAA5s Haloacetic Acids Distribution (2023)	N	1.1	ppb	No Goal for the total	60	By-product of drinking water chlorination
Inorganic Contaminants						
Barium (2022)	N	0.032	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (2022)	N	0.36	ppm	4	4.0	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead Distribution (2023)	N	1.0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Copper Distribution (2023)	N	0.29	ppm	1.3	Al=1.3	Corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives
Radioactive Contaminants						
Beta/photon emitters (2023)	N	5.7	pCi/L	0	50	Decay of natural and man-made deposits.
Combined Radium 226 / 228 (2020)	N	0.9	pCi/L	0	5	Erosion of natural deposits.

Our water system tested a minimum of 1 sample(s) per month in accordance with the Total Coliform Rule for microbiological contaminants. With the microbiological samples collected, the water system collects disinfectant residuals to ensure control of microbial growth.

Disinfectant	Date	Highest RAA	Unit	Range	MRDL	MRDLG	Typical Source
CHLORINE	2024	1.1	Ppm	0.41 - 2.03	4	4	Water additive used to control microbes

Lead and Copper data

Lead and Copper	Date Sampled	Action Level (AL)	90th Percentile	# sites Over AL	Units	Range of Tap sampling
Lead Distribution (2023)	2023	15	1	0	ppb	ND – 3
Copper Distribution (2023)	2023	1.3	0.29	0	ppm	0.039 – 0.340

Definitions of Key Terms

- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a system must follow.
- 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 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 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 Disinfectant 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.
- Non-Detects (ND) – The laboratory analysis indicates the contaminant is non-detectable.
- Parts per billion (Ppb) or Micrograms per liter (µg/L) – The equivalent of 1 minute in 2,000 years or a single penny in $10,000,000.00
- Parts per million (Ppm) or Milligrams per liter (mg/L) – The equivalent of 1 minute in 2 years or a single penny in $10,000.00.
- Picocuries per liter (pCi/L) – A measure of the radioactivity in water.
- 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.

In recent years EPA and MDE have been studying Polyfluoroalkyl substances and its effects on potable water. PFAS – short for 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.

The Maryland Department of the Environment (MDE) conducted a PFAS monitoring program for Community Water Systems from 2020 to 2022. The results are available on MDE's website: https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx.

The Environmental Protection Agency (EPA) proposed regulations for 6 PFAS compounds in drinking water in March 2023. The MCLs for PFOA and PFOS are proposed to be 4.0 parts per trillion (ppt). The proposal for HFPO-DA (GenX), PFBS, PFNA and PFHxS is to use a Hazard Index of 1.0 (unitless) to determine if the combined levels of these PFAS pose a risk and require action.

The 5th Unregulated Contaminant Monitoring Rule (UCMR5) began testing for 29 PFAS compounds and lithium in 2023, and testing will run through 2025. The UCMR5 should test all community water systems with populations of at least 3300 people. Three randomly selected systems in Maryland with populations less than 3300 people will also be tested under the UCMR5. Detections greater than the minimum reporting levels for each constituent should be reported in the CCR.

MCLs 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 experiencing adverse health effects from the contaminant. The presence of some contaminants in drinking water is unavoidable, but we make every effort to keep your drinking water at or below the levels specified by law as being safe for consumption.

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 County Utilities 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 Charles County Utilities at 301-609-7400. 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.

An initial inventory of service line pipe materials located within our service area was required to be submitted to the Maryland Department of the Environment (MDE) by October 16, 2024. Our initial inventory was submitted to MDE on 10/15/2024 and is available upon request. Additionally, this report is available at https://www.charlescountymd.gov/slai

If you are concerned about lead in your water and wish to have your water tested, contact Charles County Utilities at 301-609-7400. 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

Conserving water saves you money!

Approximately sixty percent of total household water supply is used inside the home and forty percent is used outside the home. A few simple changes can reduce water usage. Run the dishwasher only when full. Use a dishpan or plug the sink when hand-washing dishes. Run full loads of laundry instead of many small loads. Pull weeds to decrease competition for water. Repair or replace leaking hoses and sprinklers.

Source water assessment has been performed by the Maryland Department of the Environment and is accessible on their website at:
https://mde.maryland.gov/programs/Water/water_supply/Source_Water_Assessment_Program/Pages/by_county.aspx

The staff of the Department of Public Works, Utilities Division, works diligently to provide top quality water and excellent customer service. All customers are urged to protect our valuable water resources and practice conservation to ensure a sustainable water supply for our community. If you have any questions concerning this report or any aspect of your water utility, please contact Sam Simanovsky, Regulatory Compliance Officer at 301-609-7400.