Earnhart Hill Regional Water and Sewer District
2023 Consumer Confidence Report (CCR)
PWSID: OH6500812

Introduction

Earnhart Hill Regional Water and Sewer District (EHRWSD) has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water, and water system contacts. A hard copy of this report may be requested by calling our office at (740) 474-3114.

Contact Information

If you have any questions concerning our operations or long-term planning, please call our General Manager, Louis McFarland, at (740) 474-3114 Ext 115.

Public participation and comments are encouraged at regular meetings of the EHRWSD Board of Trustees which meets at 7:00 PM on the second Thursday of each month. These meetings are held in our office located at 2030 Stoneridge Drive Circleville, OH.

Source Water Information

The source of our water is ground water taken from sand and gravel deposits of the Scioto River Valley.

This source of water has a relatively high susceptibility to contamination from spills or releases of chemicals. This source is susceptible (compared to other ground water systems) because there is no significant clay overlying the aquifer deposits. There is a presence of significant potential contaminant sources in the well head protection area.

A documented contaminant plume containing low levels of 1,4-dioxane exists in the buried valley aquifer southeast of our wellfield. Remediation wells are providing hydraulic containment and simultaneous cleanup of the plume. EHRWSD's four production wells have not been affected. Implementing appropriate protective measures has minimized the risk of future contamination.

In 2019, EHRWSD purchased 100 acres of land north of our wellfield to begin development for a new wellfield. The new wellfield will allow for new production wells that will increase water production as the district grows and develops. Construction of two new production wells was completed in 2021 and are being used for drinking water production as of December 2021. EHRWSD also has an emergency connection with the City of Circleville for use during a water emergency. This connection was tested but not used in 2023. For more information about the source water assessment or what consumers can do to help protect the aquifer call our General Manager, Louis McFarland, at (740) 474-3114 Ext 115.

Sources of Contamination

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 the following substances resulting from the presence of animals or from human activity:

- Microbial contaminants, such as viruses and bacteria, which 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
- 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, USEPA 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.

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 1(800) 426-4791.

Special Precautions to be Taken

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 infection. 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 1(800) 426-4791.

Lead in the Home

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. EHRWSD is responsible for providing high quality drinking water but cannot control the variety of materials used in home 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead . A list of laboratories certified in the State of Ohio to test for lead may be found at https://epa.ohio.gov/monitor-pollution/pollution-issues/learn-about-lead , by calling (614) 644-2752, or by contacting EHRWSD at (740) 474-3114 Ext 119.

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

In 2023 Earnhart tested 30 locations and found that none of the tested sites exceeded the allowable limit for lead or copper.

PFAS

Per- and polyfluoroalkyl substances (PFAS) are a large group of man-made chemicals that have been used for decades in many consumer and industrial products. Examples of chemicals in this class include PFOA and PFOS, and more than 3,000 related compounds. Because of their oil-, stain-, and water-repellent properties, PFAS have been used in many consumer products, including non-stick cookware, stain-resistant furniture and carpets, waterproof clothing, food packaging (microwave popcorn bags, fast food wrappers, pizza boxes, etc.), cosmetics, paints, papers, protective coatings and sealants, shampoo, and dental floss. They have also been used in certain firefighting foams and various industrial processes. Because of their widespread use, many PFAS compounds have been found in the environment. PFAS are called forever chemicals because they do not easily breakdown or degrade.

Neither the USEPA nor Ohio EPA regulate the presence of PFAS chemicals in public water systems and thus there is no requirement for routine monitoring. EHRWSD has participated in a handful of sampling events for PFAS and related chemicals since 2015, including the Third Unregulated Contaminant Monitoring Rule (UCMR 3) and the Fifth Unregulated Contaminant Monitoring Rule (UCMR 5), in addition to state sampling events and non-required testing of our ground water wells. In August of 2023 while participating in the UCMR 5, one PFAS compound was estimated at very low levels, below the reporting limit of the test. The results to date have been well below the action level established by the Ohio EPA and are listed in the “Unregulated Drinking Water Standards” table below.
For more information regarding EHRWSD’s PFAS sampling history, please contact EHRWSD at (740) 474-3114 Ext 119. Additional information regarding PFAS can be found on the USEPA PFAS website: https://www.epa.gov/pfas

Availability of Monitoring Data for Unregulated Contaminants

EHRWSD participated in the 5th Unregulated Contaminant Monitoring Rule (UCMR 5) in 2023. The purpose of this sampling event was to test for contaminants that do not yet have drinking water standards set by EPA, focusing primarily on PFAS and related chemicals. We monitor for these contaminants to help EPA decide whether the contaminants should have a standard. All detected contaminants are listed in the Unregulated Drinking Water Standards chart below. As our customers, you have a right to know that this data is available. If you are interested in examining the results, please contact EHRWSD at (740) 474-3114 Ext 119.

Backflow Prevention and Cross-Connection Control

Backflow is the flow of water through a cross-connection from a possible source of contamination back into the drinking water system. It occurs when a cross-connection is created and a pressure reversal, either as backsiphonage or backpressure, occurs in the water supply piping. The concern is all cross-connections pose a potential health risk. Backflow can be a health hazard for your family or other consumers if contaminated water enters your water supply plumbing system and is used for drinking, cooking or bathing. You are legally responsible for protecting your water supply plumbing from backflow that may contaminate drinking water, either your own or someone else's. This includes complying with the plumbing code and not creating cross-connections.

What are examples of cross-connection and backflow scenarios?

- Soapy water or other cleaning compounds backsiphon into the water supply plumbing through a faucet or hose submerged in a bucket or laundry basin.
- Pool water backsiphons into the water supply plumbing through a hose submerged in a swimming pool.
- Fertilizers/pesticides backsiphon into the water supply plumbing through a garden hose attached to a fertilizer/pesticide sprayer.
- Chemicals/pesticides and animal feces drawn into the water supply plumbing from a lawn irrigation system with submerged nozzles
- Bacteria/chemicals/additives in a boiler system back siphon into the water supply plumbing.
- Unsafe water pumped from a private well applies backpressure and contaminates the public water supply through a connection between the private well discharge and the potable water supply plumbing.

If you have questions regarding backflow prevention, please call (740) 474-3114 Ext 123, or visit our website at: https://www.ehrwsd.org/backflow .

Drinking Water Information

The Ohio EPA requires regular sampling to ensure drinking water safety, however, some contaminants are monitored less than once a year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

EHRWSD had a current, unconditional license to operate the public water system in 2023.

Important Drinking Water Definitions

PFAS: Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals applied to many industrial, commercial and consumer products to make them waterproof, stain resistant, or nonstick. PFAS are also used in products like cosmetics, fast food packaging, and a type of firefighting foam called aqueous film forming foam (AFFF) which are used mainly on large spills of flammable liquids, such as jet fuel. PFAS are classified as contaminants of emerging concern, meaning that research into the harm they may cause to human health is still ongoing.

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 = Maximum Contaminant Level: The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MRDL = Maximum Residual Disinfectant Level: The highest residual disinfectant level allowed.

MRDLG = Maximum Residual Disinfectant Level Goal: The level of residual disinfectant below which there is no known or expected risk to health.

SMCL = Secondary MCL: A non-enforceable numerical limit set by the USEPA for a contaminant on the basis of aesthetic effects to prevent an undesirable taste, odor or appearance.

AL = Action Level: The concentration of a contaminant which triggers treatment or other requirements which a water system must follow.

MG/L = Milligrams per Liter or Parts per Million: A unit of measure for concentration of a contaminant. A part per million corresponds to one second in approximately 11.5 days.

UG/L = Microgram per Liter or Parts per Billion: A unit of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

pCi/L = Picocuries per liter: A common measure of radioactivity.

"<": A symbol that means "less than". A result of "<5" means that the lowest level detected was 5 and the contaminant was not detected.

NR = Not Required: Monitoring not required, but recommended

ND = Not Detected

NA = Not Applicable

Primary Drinking Water Standards							
Substances we detected	**Units**	**What`s the goal? (MCLG)**	**What`s Allowed? (MCL)**	**Level Found**	**Range**	**Violation?**	**Where did it come from?**
Disinfectant Residual							
Chlorine Residual, Total Collection Dates: 2023	**mg/L**	**MRDLG=4.0**	**MRDL=4.0**	**0.95**	**0.83-1.03**	**N**	**Water additive used to control microbes**
Total Trihalomethanes (TTHM) Collection Dates: 2023	**ug/L**	**NA**	**80**	**15.8**	**11.0-15.8**	**N**	**By-product of drinking water chlorination**
Inorganic Chemicals							
Arsenic Collection Date: 2022	**ug/L**	**0**	**10**	**1.3**	**NA**	**N**	**Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes**
Barium Collection Date: 2022	**mg/L**	**2.0**	**2.0**	**0.0624**	**NA**	**N**	**Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.**
Fluoride Collection Date: 2023	**mg/L**	**4.0**	**4.0**	**1.07**	**0.80-1.17**	**N**	**Erosion of natural deposits; water additive which promotes strong teeth**
Nitrate Collection Date: 2023	**mg/L**	**10**	**10**	**0.264**	**NA**	**N**	**Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits**
Radiologicals							
Gross Alpha Collection Date: 2022	**pCi/L**	**0.0**	**15**	**1.43**	**NA**	**N**	**Erosion of natural deposits.**
Combined Radium -226 and -228 Collection Date: 2019	**pCi/L**	**0.0**	**5**	**1.4**	**NA**	**N**	**Erosion of natural deposits.**

Lead and Copper								
Substances we detected	**Units**	**What`s the goal? (MCLG)**	**Action Level (AL)**	**Level Found**	**Range**	**Number of sites found above the action level**	**Violations?**	**Where did it come from?**
Metals								
Lead Collection Date: 2023	**ug/L**	**0.0**	**15**	**2.80**	**<5.0-3.9**	**0 out of 30**	**N**	**Erosion of natural deposits; Corrosion of household plumbing systems**
Copper Collection Date: 2023	**mg/L**	**1.3**	**1.3**	**0.116**	**0.011-0.131**	**0 out of 30**	**N**	**Erosion of natural deposits; Corrosion of household plumbing systems**

Other Water Quality Parameters of Interest

Substances we detected	Units	What`s the goal? (SMCLG)	What`s Allowed? (SMCL)	Level Found	Range	Where did it come from?
Hardness, Total (CaCO3) Collection Dates: 2023	mg/L	NA	NA	168	100-440	Naturally Occurring
Iron Collection Dates: 2023	mg/L	0.1	0.3	0.02	ND-0.09	Erosion of natural deposits
Manganese Collection Dates: 2023	mg/L	0.04	0.05	0.01	ND-0.04	Erosion of natural deposits

Unregulated Drinking Water Standards

Substances we detected	Units	What's the goal? (MCLG)	What's Allowed? (MCL)	Level Found	Range	Where did it come from?
UCMR 5 Collection Dates: 2023						
Lithium	ug/L	NA	NA	14.3	9.4-14.3	Industrial chemical
Perfluorobutanesulfonic acid (PFBS)	ug/L	NA	NA	0.0011	ND-0.0011	Industrial chemical
Total Trihalomethanes (TTHM) Collection Dates: 2023						
Chloroform	ug/L	NA	NA	2.4	1.6-2.4	By-product of drinking water chlorination.
Bromoform	ug/L	NA	NA	2.2	1.6-2.2	By-product of drinking water chlorination.
Bromodichloromethane	ug/L	NA	NA	5.1	3.4-5.1	By-product of drinking water chlorination.
Dibromochloromethane	ug/L	NA	NA	6.1	4.5-6.1	By-product of drinking water chlorination.
Haloacetic Acids (HAA5) Collection Dates: 2023						
Dibromoacetic Acid	ug/L	NA	NA	1.2	ND-1.2	By-product of drinking water chlorination.