

# Severn Water Company

## 2022 Drinking Water

### Quality Report

PWSID: 002-0027



## Important Information About Your Drinking Water

We are pleased to present to you the annual report on your water for the year 2022. This shows you the testing done throughout 2022. Drinking water delivered by the Severn Water Company contains far fewer impurities than are allowed in the standards set by the Environmental Protection Agency. Details are shown on Page 3.

The Environmental Protection Agency (EPA) regulates Public Water Systems and the contaminants found in water through the implementation of the Safe Drinking Water Act (SDWA). The SDWA sets regulations and guidelines for how public water systems operate and identifies several hundred drinking water contaminants, establishes monitoring frequencies and limitations. The Maryland Department of the Environment (MDE) is responsible for the enforcement of the SDWA and routinely completes Sanitary Surveys as part of their ongoing inspection and monitoring program. Maryland Environmental Service (MES) provides safe dependable operation of the water system and is dedicated to consistently providing high quality drinking water that meets or exceeds the SDWA standards.

If you have any questions about this report or have questions concerning your water utility, please contact **Jay Janney at 410-729-8350, e-mail [jjanney@menv.com](mailto:jjanney@menv.com)**.

### For More Information:

For the opportunity to ask more questions or participate in decisions that may affect your drinking water quality, please contact **Mr. Robert Freburger with the Severn Water Company at 410-628-1500**.

**T**he Severn Water Company water works consists of two drilled wells in the Patapsco aquifer. After the water is pumped out of the wells, the pH is adjusted and a purifier is added to protect against microbial contaminants. The Maryland Department of the Environment has performed an assessment of the source water. It was determined that Severn Water Company's water supply is not susceptible to inorganic compounds, organic compounds, radionuclides, or microbiological contaminants. A copy of the results is available. Call **Maryland Environmental Service at 410-729-8350**.

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**S**ome 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 (1-800-426-4791)**.

Maryland Environmental Service, an agency of the State of Maryland, is the operator of the water treatment plant and your supplier of water. Maryland Environmental Service prepared this report on behalf of the Severn

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## Definitions:

- ◆ **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.
- ◆ **Action Level** - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- ◆ **Treatment Technique (TT)** - A required process intended to reduce the level of a contaminant in drinking water.
- ◆ **Turbidity** - Relates to a condition where suspended particles are present in the water. Turbidity measurements are a way to describe the level of “cloudiness” of the water.
- ◆ **pCi/l** - Picocuries per liter. A measure of radiation.
- ◆ **ppb** - parts per billion or micrograms per liter.
- ◆ **ppm** - parts per million or milligrams per liter.
- ◆ **ppt** - parts per trillion or nanograms per liter



## Special points of interest:

The water at the Severn Water Company is tested for over 120 different compounds. The Severn Water Company Drinking Water met all of the State and Federal requirements.

Drinking Water, including bottled water, may reasonably be expected to contain at least small amounts of some compounds. The presence of these compounds 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’s) Safe Drinking Water Act Hotline (1-800-426-4791)**.

In the latter half of 1996, Congress and the President of the United States amended and reauthorized the Safe Drinking Water Act (SDWA). This act is the primary federal initiative to ensure that you are provided with safe drinking water. States can adopt the federal standards or set more stringent standards, which are then enforced by the state’s environmental agency. In Maryland, the Maryland Department of the Environment (MDE) enforces these standards. The amended SDWA contains important provisions such as the regulations of contaminants, protection of source waters, and certification of individuals who operate water treatment plants. Severn Water Company strongly endorses and supports each of these concepts.

## Monitoring Violation

As the result of a scheduling error, this system only collected four of the six required March 2023 samples for Total Coliform testing. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. As of this printing, during 2023, the system has fully completed all total coliform testing for each month aside from March. The 2023 results have all been negative and met all water quality requirements. As a result, there is no expectation that the quality of the drinking water was effected during this time.

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Contaminant	Highest Level Allowed (EPA's MCL)	Highest Level Detected	Goal (EPA's MCLG)
<b>Regulated at the Treatment Plant</b>			
Nitrate	10 ppm	2.0 ppm	10 ppm
Source: Runoff from fertilizer use; natural deposits; Leaching from septic tanks and sewage (Range: 0.0 - 2.0 ppm)			
Barium (2021 Testing)	2000 ppb	22 ppb	2000 ppb
Source: Erosion of natural deposits, discharge from drilling waste, and metal refineries (Range 20 - 22 ppb)			
Gross Alpha (2020 Testing)	15 pCi/l	2.3 pCi/l*	0.0 pCi/l
Source: Erosion of natural deposits * Please read page 4 of the Consumer Confidence report for more information on Gross Alpha Emitters			
Gross Beta - (2020 Testing)	50 pCi/l*	4.5 pCi/l**	0.0 pCi/l
Source: Erosion of natural deposits *EPA considers 50 pCi/L to be the level of concern for beta particles ** Because the beta particle results were below 50 pCi/l, no testing for individual beta particle constituents was required			
Combined Radium 226 and 228 (2020 Testing)	5 pCi/l	2.0 pCi/l	0.0 pCi/l
Source: Erosion of natural deposits			
<b>Regulated in the Distribution</b>			
Total Trihalomethanes (TTHM) (2022 Testing)	80 ppb	3.2 ppb	n/a
Source: By-product of drinking water disinfection			
Chlorine	4 ppm	1.35 ppm*	4 ppm
Source: Water additive used to control microbes. *Annual Rolling Average (Range: 1.31 - 1.35 ppm)			
<b>Regulated in the Distribution System</b>		<b>Action Level</b>	<b>90th percentile</b>
Copper (2021 Testing)	1300 ppb	160 ppb	1300 ppb
Source: Corrosion of household plumbing fixtures and systems, erosion of natural deposits, and leaching from wood preservatives			
Lead (2021 Testing)	15 ppb	<2.0 ppb	0 ppb
Source: Corrosion of household plumbing fixtures and systems; Erosion of natural deposits			

## Result Table

The table above lists all the drinking water contaminants that were detected during the 2022 calendar year. The presence of these compounds in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in the table is from testing done January 1 – December 31, 2022. The State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

## Contaminants That May Be Present in Source Water:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. Inorganic Contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming. 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 stormwater runoff, and septic systems. Radioactive Contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.



## Sources of Drinking Water

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.

*In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain compounds in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.*



## Lead Prevention

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. The Severn Water Company's Water Treatment Plant 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, please contact [jjanney@menv.com](mailto:jjanney@menv.com) for a list of laboratories in your area that provide drinking water testing. 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>.

## Important information Regarding Gross Alpha Emitters:

Alpha emitters are naturally occurring radiations in soil, air and water. These emitters generally occur when certain elements decay or break down in the environment. The emitters enter drinking water through various methods including the erosion of natural deposits. There are no immediate health risks from consuming water that contains gross alpha, however some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer. As featured in the Water Quality table on page 3, the current highest level of gross alpha detected is 2.3 pCi/L, which is below the 15 pCi/L MCL.

*If you have any questions about this report or your drinking water, please call Jay Janney at 410-729-8350 or email your request to [jjanney@menv.com](mailto:jjanney@menv.com).*



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## Polyfluoroalkyl Substances

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. PFOA and PFOS are two of the most prevalent PFAS compounds. PFOA and PFOS concentrations were measured from samples taken at the point of entry to your water system in 2022 and are listed below. PFOA results were <1.0 parts per trillion (ppt) or non-detect. PFOS results were <1.0 parts per trillion (ppt) or non-detect. 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 limit of 1 (unitless) for four additional PFAS compounds (PFHxS, GenX Chemicals, PFNA and PFBS). The four (4) additional PFAS parameters were also analyzed in 2022 with group hazard indexes of <1.0 or non-detect. Future regulations would require additional monitoring as well as certain actions for systems above the MCLs or Hazard Index. 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).

PFAS parameters	Result	Proposed limit	PFAS parameters	Result	Proposed limit (* unitless number used to calculate Hazard index)
PFOS	<1.0 ppt	4.0 ppt	PFHxS	<1.0 ppt	9 ppt
PFOA	<1.0 ppt	4.0 ppt	GenX Chemicals	<1.0 ppt	10 ppt
			PFNA	<1.5 ppt	10 ppt
			PFBS	<1.0 ppt	2000 ppt
			Hazard Index	0 *	1.0 *

## Water Conservation

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.

- ◆ Check for water leaks by the reading your water meter before and after a two hour period when no water is being used in your home. If the reading changes then there is probably a leak in your home.
- ◆ Take a shower! Filling up a bathtub can use up to 70 gallons of water while a shower generally uses 10 to 25 gallons. Taking shorter showers saves even more water.
- ◆ Make sure your washing machine and dishwasher are fully loaded before running.
- ◆ Are you in the market for a new water fixture such as a faucet, showerhead or toilet? Consider a Water-Sense labeled fixture and reduce your water use by 30% percent or more versus standard flow fixtures. Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information on water efficiency products and methods.

Source: <http://www.epa.gov/watersense> & <http://eartheasy.com>