

Severn Water Company

2016 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 2016. This shows you the testing done throughout 2016. 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 jjann@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. Rick Chadsey with the Severn Water Company at 410-628-1500**.

The 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**.

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

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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 Water Company.

Severn Water Company Treated Water Quality Report 2016

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.



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.

Severn Water Company Treated Water Quality Report 2016

Contaminant	Highest Level Allowed (EPA's MCL)	Highest Level Detected	Goal (EPA's MCLG)
Regulated at the Treatment Plant			
Nitrate	10 ppm	2.7 ppm	10 ppm
Source: Runoff from fertilizer use; natural deposits; Leaching from septic tanks and sewage (Range: 1.9 - 2.7 ppb)			
Barium (2015 Testing)	2000 ppb	17.4 ppb	2000 ppb
Source: Erosion of natural deposits, discharge from drilling waste, and metal refineries (Range 11.3 - 17.4 ppb)			
Gross Alpha (2014 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 - (2008 Testing)	50 pCi/l*	6 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 (2014 Testing)	5 pCi/l	2.2 pCi/l	0.0 pCi/l
Source: Erosion of natural deposits			
Chromium	100 ppb	2.8 ppb	100 ppb
Source: Discharge from steel and pulp mills as well as erosion of natural deposits (Range: 0 - 2.8 ppb)			
Regulated in the Distribution			
Total Trihalomethanes (TTHM) (2016 Testing)	80 ppb	5.8 ppb	n/a
Source: By-product of drinking water disinfection			
Chlorine	4 ppm	1.0 ppm	4 ppm
Source: Water additive used to control microbes. (Range: 0.9 - 1.3 ppm)			
Regulated in the Distribution System			
	Action Level	90th percentile	Ideal Goal
Copper (2015 Testing)	1300 ppb	62 ppb	1300 ppb
Source: Corrosion of household plumbing fixtures and systems, erosion of natural deposits, and leaching from wood preservatives			
Lead (2015 Testing)	15 ppb	3 ppb	0 ppb
Source: Corrosion of household plumbing fixtures and systems; Erosion of natural deposits			
Regulated in the Distribution System			
	No more than one positive result in a month MCL	Highest number of positive results in any month	Ideal Goal
Total Coliform	1	1	0
Source: Naturally present in the environment *MCL was not exceeded in 2016*			

Result Table

The table above lists all the drinking water contaminants that were detected during the 2016 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, 2016. 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.

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

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. The Severn Water Company 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 drinking 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 **EPA Safe Drinking Water Hotline at 1-800-426-4791** or 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 jjann@menv.com.



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