

# Annual Drinking Water Quality Report for 2021

Calvert Manor Corporation • Accokeek, Maryland

PWSID MD 0160004

---

WE'RE PLEASED TO PRESENT our Drinking Water Quality Report for Jan. 1-Dec. 31, 2021. The following report is provided annually in compliance with federal regulations and is intended to help you understand the efforts we make to ensure the quality of your water. *Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.*

## 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.

The sources of our drinking water are the groundwater in the Patapsco Aquifer, which our wells tap about 372 feet to 635 feet below the surface. An aquifer is an underground river or reservoir of water, which is tapped by drilling wells and pumping the water to the surface for distribution. The impervious layers of earth between surface sources of contamination and this underground river help protect it. The sands of the aquifer help to purify the water, making it easier for us to chlorinate it before we pump it into your water distribution system. One well is located at the pump house and one is just off of Captain Brendt Drive. A source water assessment was completed by the Maryland Department of the Environment and is available at [mde.maryland.gov](http://mde.maryland.gov).

## Contaminants in Drinking Water

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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

Contaminants that may be present in source water include:

- 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 byproducts 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### **Information for People with Vulnerabilities**

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 people, 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 (800-426-4791).

### **Lead in Drinking Water**

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. We are responsible for providing high quality drinking water, but we 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 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 or at <http://www.epa.gov/safewater/lead>.

### **PFAS Information**

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.

Currently, there are no federal regulations (i.e. Maximum Contaminant Levels [MCLs]) for PFAS in drinking water. However, the EPA has issued a Health Advisory Level (HAL) of 70 parts per trillion (ppt) for the sum of PFOA and PFOS concentrations in drinking water. While not an enforceable regulatory standard, when followed, the EPA HAL does provide drinking water customers, even the most sensitive populations, with a margin of protection from lifetime exposure to PFOA and PFOS in drinking water. Beginning in 2020, the Maryland Department of the Environment initiated a PFAS monitoring program. The combined PFOA and PFOS concentration from samples taken from our water system was below the detection limit. MDE

anticipates that EPA will establish an MCL for PFOA and PFOS in the near future. This would entail additional monitoring. Additional information about PFAS can be found on the MDE website: [mde.maryland.gov](http://mde.maryland.gov)

In April 2022 MDE sampled both of Calvert Manor's wells and no PFAS were detected. See p. 6 for the report of MDE's analysis of our water.

### **More Information on Your Water System**

If you have any questions about this report or concerning your water utility, please contact the President of the Calvert Manor Corporation (CMC), Lee Puterbaugh, at (301) 752-4621, System Operator Doug Harris at (301) 535-2878, or any other director. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled CMC board meetings. They are held on the second Tuesday of every month beginning at 7:00 p.m. Email [calvertmanorcorp@yahoo.com](mailto:calvertmanorcorp@yahoo.com) for the location, which changes monthly.

### **Water Quality Test Results**

The following pages report on regulated contaminants and PFAS in our drinking water, beginning with definitions of terms used that may not be familiar.

**Definitions.** The following tables contain scientific terms and measures, some of which may require explanation.

*Avg* —Regulatory compliance with some MCLS are based on running annual average of monthly samples.

*Maximum Contaminant Level or MCL* —The highest level of a contaminant that is allowed in drinking water.

*Maximum Contaminant Level Goal or 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. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

*Maximum Residual Disinfectant Level Goal or MRDLG* — The level of a 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.

*Treatment Technique or TT* — A required process intended to reduce the level of a contaminant in drinking water.

*na* — not applicable

*mrem* — millirems per year (a measure of radiation absorbed by the body)

*ppm* — milligrams per liter or parts per million, or one ounce in 7,350 gallons of water.

*ppb* — micrograms per liter or parts per billion, or one ounce in 7,350,000 gallons of water .

*Level 1 Assessment* — A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found.

*Level 2 Assessment* — A very detailed study of the water system to identify potential problems and determine (if possible) why an E. Coli MCL violation has occurred and/or why total coliform bacteria have been found on multiple occasions.

*Action Level (AL)*—The concentration of a contaminant which, if exceeded, triggers treatment or other requirements.

## Regulated Contaminants

Disinfectants and Disinfection Byproducts								
	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2021	0.4	0.3-0.5	MRDL G=4	MR DL=4	ppm	N	Water additive used to control microbes
TTHMs (Total trihalomethanes)	7/31/2020	4.2	4.2-4.2	No goal for the total	80	ppb	N	Byproduct of drinking water disinfection
Inorganic Contaminants								
Fluoride	11/09/2018	0.7	0.7-0.7	4	4.0	ppm	N	Erosion of natural deposits; discharge from fertilizer and aluminum factories

Lead and Copper							
Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	Sites Over AL	Units	Likely Source of Contamination
Copper	2020	1.3 ppm	1.3 ppm	0.22 ppm	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

## Violations

Fluoride			
Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of childrens teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of teeth, and occurs only in developing teeth			
Violation Type	Violation Begin	Violation End	Violation Explanation
Monitoring, ROUTINE MAJOR	1/1/2019	12/31/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

MARYLAND DEPARTMENT OF THE ENVIRONMENT  
 PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) ANALYTICAL RESULTS  
 CALVERT MANOR  
 MD0160004

Analyte	CALVERT MANOR 1 (NEW) PG941402	CALVERT MANOR 2 PG670013
11Cl-PF3OUdS	ND	ND
ADONA	ND	ND
9Cl-PF3ONS	ND	ND
HFPO-DA	ND	ND
N-EtFOSAA	ND	ND
N-MeFOSAA	ND	ND
PFBS	ND	ND
PFDA	ND	ND
PFDoA	ND	ND
PFHpA	ND	ND
PFHxS	ND	ND
PFHxA	ND	ND
PFNA	ND	ND
PFOS	ND	ND
PFOA	ND	ND
PFTA	ND	ND
PFTTrDA	ND	ND
PFUnDA	ND	ND
Total PFOA/PFOS	ND	ND

Unfinished groundwater samples were collected on April 6, 2022.  
 All results are in parts per trillion (ppt).