

# City of Westminster's Cranberry Water System

This brochure explains the quality of drinking water provided by the Cranberry Water System. Included is a listing of results from water quality tests as well as an explanation of where our water comes from and tips on how to interpret the data. We're proud to share our results with you. Please read them carefully.

## Water Source

The Cranberry Water System is supplied by a blended source of groundwater and surface water. The surface water source is obtained from the Patapsco River. The groundwater supply is pumped from eleven (12) wells around the community, which contribute 20 to 30 percent of the total water supply. Source water assessments are completed for the Cranberry Water Plant and the wells in the Cranberry System. A copy of each of the reports is available at the Westminster Branch of the Carroll County Public Library.

## Important Health Information

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 Safe Drinking Water Hotline (800-426-4791).

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. Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) 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.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D) 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.
- (E) 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 which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 (800-426-4791).

## What About Radon?

Cranberry Water System tested for radon in your water and found it to be present at levels of 195 to 4,450 picocuries per liter. There is no regulation for radon levels in drinking water at this time.

Radon is found throughout the U.S. It is a radioactive gas that you can't see, taste, or smell. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air.

If you are concerned about radon in your home and would like additional information on how to test your home, contact the EPA's Radon Hotline (800-SOS-RADON).

## How to Read the Water Quality Table

The results of tests performed in 2022 or the most recent testing available are presented in the table. Terms used in the Water Quality Table and in other parts of this report are defined here.

**Maximum Contaminant Level or 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 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.

**Detected Level:** The highest level detected of a contaminant for comparison against the acceptance levels for each parameter. These levels could be the highest single measurement, or an average of values depending on the contaminant.

**Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Range:** The lowest to the highest values for all samples tested for each contaminant. If only one sample is tested, or no range is required for this report, then no range is listed for that contaminant in the table.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

Please call Bret Grossnickle at 410-848-7040 for information about participation in our community's decisions affecting drinking water.

## Member of:

American Water Works Association (AWWA)

PWSID #0060015



# City of Westminster's Cranberry Water System Water Quality Table

Inorganic Contaminants	Date Tested	Units	MCLG	MCL	Highest Level Detected	Range	Major Sources
Barium	2022	ppm	2	2	0.044	0 – 0.044	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Arsenic	2021	ppb	0	10	3	0 - 3	Erosion of natural deposits. Runoff from orchards. Runoff from glass and electronics production wastes.
Cadmium	2022	ppb	5	5	2	0 – 2.8	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
Chromium	2022	ppb	100	100	4.4	0 – 4.4	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	2022	ppm	4	4	0.3	0 – 0.41	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Selenium	2021	ppb	50	50	5.2	0 – 5.2	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Nitrate	2022	ppm	10	10	6	1.96 – 12.5	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
							Erosion of natural deposits
Copper	2021	ppm	1.3	AL=1.3	90% level = 0.46	---	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	2021	ppb	0	AL=15	90% level = 0.0	---	Corrosion of household plumbing systems; Erosion of natural deposits

Microbiological Contaminants	Date Tested	Units	Limit (Treatment Technique)	Surface Water		Major Sources
					Level Detected	
Turbidity	2022	NTU	5	TT	0.2	Soil runoff
Lowest monthly % meeting limit	2022	NTU	0.3		100%	Soil runoff

Radioactive Contaminants	Date Tested	Units	MCLG	MCL	Highest Level Detected	Range	Major Sources
Beta/photon emitters	2019	pCi/L	0	50	2.8	2.8 – 2.8	Decay of natural and man-made deposits
Combined Radium 226/228	2021	pCi/L	0	5	0.6	0 – 0.6	Erosion of natural deposits
Gross Alpha excluding radon and uranium	2020	pCi/L	0	15	2	0 – 2	Erosion of natural deposits

Volatile Organic Contaminants	Date Tested	Units	MCLG	MCL	Highest Level Detected	Range	Major Sources
Chlorine	2022	ppm	MRDLG = 4	MRDL = 4	1.2	1.1 – 1.2	Water additive used to control microbes
TTHM	2022	ppb	na	80	LRAA = 64	15.7 – 112.9	By-product of drinking water chlorination
HAA5	2022	ppb	na	60	LRAA = 37	10.2 – 65	By-product of drinking water chlorination

Synthetic Organic Contaminants	Date Tested	Units	MCLG	MCL	Highest Detected Level	Range	Major Sources
Atrazine	2020	ppb	3	3	0	0-0	Runoff from herbicide used on row crops
Per – and Polyfluoroalkyl Substances ( PFAS )	2020	ppt	na	na	346	0 – 346	Manmade chemicals used in consumer products and industrial applications

## Key To Table

AL = Action Level  
MCL = Maximum Contaminant Level  
MCLG = Maximum Contaminant Level Goal  
NTU = Nephelometric Turbidity Units  
pCi/L = picocuries per liter (a measure of radioactivity)  
ppm = parts per million, or milligrams per liter (mg/L)  
ppb = parts per billion, or micrograms per liter (ug/L)  
ppt = parts per trillion, or 1 nanogram per kilogram  
LRAA = locational running annual average  
TT = Treatment Technique  
na = not applicable  
ND = Non Detect

This report was provided with the technical assistance of Consumer Confidence Services, a division of Environmental Health Laboratories.

For more information, call Bret Grossnickle with the City of Westminster at 410-848-7040.

Unregulated Contaminants	Date Tested	Units		Highest Detected Level	Range	Major Sources
PFOA	2022	ppb		20.6	1.38 – 20.6	Human made chemicals used in manufacturing – See PFAS Note Below
PFOS	2022	ppb		181	1.45 - 181	Human made chemicals used in manufacturing – See PFAS Note Below
PFBS	2022	ppb		14.2	1.75 – 14.2	Human made chemicals used in manufacturing – See PFAS Note Below
PFHxS	2022	ppb		80.6	1.16 – 80.6	Human made chemicals used in manufacturing – See PFAS Note Below
PFNA	2022	ppb		21.7	12 – 21.7	Human made chemicals used in manufacturing – See PFAS Note Below
HFPO-DA	2022	ppb		ND	ND	Human made chemicals used in manufacturing – See PFAS Note Below

### Nitrate Statement

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your healthcare provider.

### Lead Statement

*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. **Cranberry Water System** 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 [City of Westminster Water Treatment – 410-848-7040]. 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>.*

**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 concentrations from samples taken from our water system in 2022 ranged from [1.38]-[20.6] parts per trillion (ppt); PFOS concentrations from samples taken from our water system in 2022 ranged from [1.45]-[181] ppt. 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 for four additional PFAS compounds. Future regulations would require additional monitoring as well as certain actions for systems above the MCLs. 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: <http://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx>













