PWSID# 0060015 CCR 2021

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 **2021** 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	2021	ppm	2	2	0.096	0 – 0.096	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	2021	ppb	5	5	1	0 – 2.9	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
Chromium	2021	ppb	100	100	13	0 – 13	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	2021	ppm	4	4	0.7	0 – 0.74	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	2021	ppm	10	10	5	2.5 – 5.16	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 Level Detected	Surface Water	Major Sources
Turbidity	2021	NTU	5	TT	0.25		Soil runoff
Lowest monthly % meeting limit	2021	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	2021	ppm	MRDLG = 4	MRDL = 4	1.2	1.1 – 1.2	Water additive used to control microbes
TTHM	2021	ppb	na	80	LRAA = 71	23.2 – 90	By-product of drinking water chlorination
HAA5	2021	ppb	na	60	LRAA = 38	0 – 67.5	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

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.

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 City of Westminster 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 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

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.

"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 U.S. Environmental Protection Agency (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 (MDE) initiated a PFAS monitoring program. The combined PFOA and PFAS concentration from samples taken from our water system was 346 ppt. This sample came from Well #8 which was removed from service pending an upgrade to remove PFAS substances from the water. 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"