

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 nine (9) 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 2009 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)

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City of Westminster's Cranberry Water System Water Quality Table

Inorganic Contaminants	Date Tested	Units	MCLG	MCL	Highest Level Detected	Range	Major Sources
Barium	2009	ppm	2	2	0.081	0.008 - 0.081	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Cadmium	2009	ppb	5	5	2.5	.01 – 2.5	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
Chromium	2009	ppb	100	100	8.6	2.7 – 8.6	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	2009	ppm	4	4	1.22	0.4 – 1.22	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Selenium	2009	ppb	50	50	15	<5 – 15	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Nitrate	2009	ppm	10	10	7.53	3.6 – 7.53	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sulfate	2007	ppm	na	na	24	---	Erosion of natural deposits
Copper	2009	ppm	1.3	AL=1.3	90% level = 0.62	---	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	2009	ppb	0	AL=15	90% level = 4	---	Corrosion of household plumbing systems; Erosion of natural deposits

Microbiological Contaminants	Date Tested	Units	MCLG	MCL	Surface Water	Surface Water	Major Sources
					Highest Level Detected	Range	
Turbidity ³	2009	NTU	na	TT	0.45	0.01 – 0.45	Soil runoff

Radioactive Contaminants	Date Tested	Units	MCLG	MCL	Highest Level Detected	Range	Major Sources
Alpha emitters	2007	pCi/L	0	15	6	2 - 6	Erosion of natural deposits
Beta/photon emitters	2007	pCi/L	0	50	5	3 - 5	Decay of natural and man-made deposits

Volatile Organic Contaminants	Date Tested	Units	MCLG	MCL	Average Detected Level	Range	Major Sources
TTHMs (Total trihalomethanes)	2009	ppb	na	80	26.12	0 – 76.3	By-product of drinking water chlorination
HAA5 (Haloacetic Acid 5)	2009	ppb	na	60	10.5	0 – 40	By-product of drinking water chlorination
Methyl – Tertiary – Butyl – Ether	2009	ppb	AL = 20	na	1.2	---	Octane enhancer in unleaded gasoline

Synthetic Organic Contaminants	Date Tested	Units	MCLG	MCL	Highest Detected Level	Range	Major Sources
Di(2-ethylhexyl)phthalate	2008	ppb	0	6	0.75	0.5 – 0.75	Discharge from rubber and chemical factories
Carbofuran	2009	ppm	0.04	0.04	0.0002	---	Leaching of soil fumigant used on rice and alfalfa
Pentachlorophenol	2009	ppm	0	0.001	0.0002	---	Discharge from wood-preserving factories
2,4,5-TP (Silvex)	2009	ppm	0.05	0.05	0.00084	---	Residue of banned herbicide

* **Violation Notice:** The once every three years compliance sample for fluoride was missed in December 2009 for Well 3. The sample was taken in January 2010 with no violation of the MCL for fluoride. Due to the addition of fluoride to the potable water supply for the prevention of dental caries, fluoride levels are monitored in house on a daily basis with the measured level never exceeding the MCL.

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)
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.