Annual Drinking Water Quality Report
Circle Water Supply
PWSID: 6099100

INTRODUCTION

This Annual Drinking Water Quality Report for calendar year **2020** is designed to inform you about your drinking water quality. Our goal is to provide you with a safe and dependable supply of drinking water, and we want you to understand the efforts we make to protect your water supply. The quality of your drinking water must meet state and federal requirements administered by the Virginia Department of Health (VDH). If you have questions about this report, want additional information about any aspect of your drinking water, or want to know how to participate in decisions that may affect the quality of your drinking water, please contact Jonathon Weakley at 540-775-2746.

GENERAL INFORMATION

Drinking water, including bottled drinking 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 can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap and bottled) include wells, rivers, lakes, and springs. As water travels over the surface of the land or through the ground, it may pick up substances, including: microbial contaminants (bugs), inorganic chemical contaminants (salts and metals), organic chemical contaminants (natural and synthetic), and/or radioactive contaminants. To ensure that tap water is safe to drink, the US EPA prescribes and the Virginia Department of Health enforces regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration and Virginia Department of Agriculture address bottled water.

SOURCE(S) AND TREATMENT OF YOUR DRINKING WATER

The sources of your drinking water are two groundwater wells. Well #1 is located on Carleton Dr. Well #2 is located off Rt. 205. It is provided with chlorine disinfection.

The Virginia Department of Health conducted a source water assessment of our system during 2002. Our wells were determined to be of low susceptibility to contamination. Customers can pick up a copy of the source water assessment at the Service Authority office. The address is 9207 King's highway.

DEFINITIONS

Contaminants in your drinking water are routinely monitored according to Federal and State regulations. The tables on the next page show the results of our monitoring. In the tables and elsewhere in this report you will find many terms and abbreviations you might not be familiar with. The following definitions are provided to help you better understand these terms:

Non-detects (ND) - lab analysis indicates that the contaminant is not present

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Action Level (AL) - 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.

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.

Level 1 Assessment - A Level 1 assessment is a study of the waterworks to identify potential problems and determine, if possible, why total coliform bacteria have been found in our waterworks.

WATER QUALITY RESULTS

I. Microbiological Contaminants

Contaminant	Level Allowed	No. of Samples	Violation/Assessment(Y/N)	Mon & Yr	Typical Source of Contamination
Total Coliform Bacteria	Presence of coliform bacteria in one sample per month	0	N	2020	Naturally present in the environment
E. coli Bacteria	One unconfirmed sample per month.	0	N	2020	Human and animal fecal waste

II. Lead and Copper Contaminants

Contaminant	Units of Measurement	Action Level	MCLG	Results of Samples for the 90th	# of Sampling Sites Exceeding	Action Level Exceeded	Mon & Yr of Sample	Typical Source of Contamination
Lead	ppb	15	15	ND	0	N	2019	Corrosion of household plumbing systems.
Copper	ppm	1.3	1.3	0.18	0	N	2019	Corrosion of household plumbing systems.

Lead Education Statement

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. Circle 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 15 to 30 seconds or until it becomes cold or reaches a steady temperature before using water for cooking or drinking. 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 at *http://www.epa.gov/safewater/lead.*

III. Other Chemical and Radiological Contaminants

Contaminant	Units of Measure	MCLG	MCL	Level Detected	Range of Detection at Sampling Points	Violation Y/N	Mon & Yr of Sample	Typical Source of Contamination
Chlorine (as Cl2)	ppm	4	4	1.2	0.28-2.2	N	2020	Water additive used to control microbes
Nitrate	ppm		10	ND	ND	N	01/2020	Erosion of natural deposits, or fertilizers.
Fluoride	ppm	4	4	0.8	0.6-0.8	N	01/2020	Erosion of natural deposits.
Barium	ppm	2	2	0.02	0.02	N	01/2020	Erosion of natural deposits
Gross Alpha	pCi/L	0	15	6.2	5.6-6.2	N	02/2017	Decay of natural minerals.
Combined Radium	pCi/L	0	5	ND	ND	N	02/2017	Decay of natural & man-made minerals.
Total Tri-halomethanes	ppb	N/A	80	3.4	3.4	N	07/2019	By-product of drinking water chlorination
Haloacetic Acids	ppb	N/A	60	ND	ND	N	07/2019	By- product of drinking water chlorination

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. The tables list only those contaminants that had some level of detection. Many other contaminants have been analyzed but were not present or were below the detection limits of the lab equipment. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

MCLs are set at very stringent levels by the U.S. Environmental Protection Agency. In developing the standards EPA assumes that the average adult drinks 2 liters of water each day throughout a 70-year life span. EPA generally sets MCLs at levels that will result in no adverse health effects for some contaminants or a one-in-ten-thousand to one-in-a-million chance of having the described health effect for other contaminants.

VIOLATION INFORMATION
Your water system did not have any violations during 2020.

WATER CONSERVATION TIPS

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.
- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

This Drinking Water Quality Report was prepared by:
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