For more information about this Water Quality Report, please contact our Water Control Center at 703-228-6555.

You may also consult the County's website at *www.arlingtonva.us* and the U.S. Environmental Protection Agency (EPA)'s website at *www.epa.gov/safewater*

Electronic copies of this report are available online at www.*arlingtonva.us/waterqualityreport*

ARLINGTON
VIRGINIA

Department of Environmental Services

Water, Sewer and Streets Bureau

2023 Annual Water Quality Report

WILLSTON REPORT

The Arlington County Water, Sewer and Streets Bureau is committed to providing residents with a reliable supply of high quality drinking water. We test County water using sophisticated equipment and advanced procedures and our water meets all state and federal standards for water quality. This annual "Consumer Confidence Report," required by the Safe Drinking Water Act (SDWA), tells you where your water comes from, what our tests show about it, and other things you should know about drinking water.

El informe contiene información importante sobre la calidad del agua en su comunidad. Tradúzcalo ó hable con alguien que lo entienda bien.

NOTICE ABOUT PERCHLORATE

Perchlorate is a naturally occurring as well as man-made compound. Its presence in drinking water is currently unregulated and utilities are not required to monitor for it. The Washington Aqueduct has been voluntarily monitoring for perchlorate since 2002. The EPA initially established a reference dose of 24.5 parts per billion (ppb) for perchlorate and beginning in 2009 has proposed an interim health advisory of 15 ppb. A reference dose is a scientific estimate of daily exposure level that is not expected to cause adverse health effects in humans. The reference dose concentration was used in the EPA's efforts to address perchlorate in drinking water and to establish the interim health advisory.

The source and treated water samples collected in 2023 from the Dalecarlia and McMillian treatment plants found an average of 0.3 ppb. The highest level detected was 0.8 ppb. If you have special health concerns, you may want to get additional information from the EPA at water.epa.gov/drink/contaminants/unregulated/perchlorate.cfm or contact the EPA's Safe Drinking Water Hotline at 800-426-4791.

WHERE DOES OUR WATER COME FROM?

Arlington County purchases its water from the Washington Aqueduct Division of the U.S. Army Corps of Engineers. The Washington Aqueduct operates two water treatment plants in the District of Columbia. The plants treat water from a surface water source, the Potomac River. Arlington's water is treated at the Dalecarlia Treatment Plant located on MacArthur Boulevard in Northwest Washington. The Interstate Commission on the Potomac River Basin conducted a Source Water Assessment of the Potomac River watershed in April 2002. The assessment identified urban runoff, toxic spills, agriculture and inadequate wastewater treatment as potential contamination sources to the water supply. Contact the Interstate Commission on the Potomac River Basin at (301) 984-1908 for more information. For additional source water information, you may also read the Arlington Water System 2023 Annual Water Quality Report at: *arlingtonva.us/Government/Programs/Water-Utilities/Water/Water-Quality-Reports.* Arlington County maintains water quality assurance through our regular water distribution and storage evaluations and routine water sampling analysis.

WHAT ELSE SHOULD I KNOW?

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water pro vided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. 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 at 1-800-426-4791.

LEAD IN DRINKING WATER

The EPA finalized the Revised Lead and Copper Rule in December 2023. Hundreds of water samples have been taken throughout Arlington County to determine the lead concentration in our water. Historically, these concentrations have been below the action level for lead. 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. Arlington County 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 are available from the Safe Drinking Water Hotline (1-800-426-4791) or at www.epa.gov/safewater/lead.

Property Managers of Multiple Unit Dwellings:

Please share this information with all other people who drink this water, especially those who may not have received this Water Quality Report directly. You can do this by posting this notice in a public place or distributing copies by hand or mail. If additional copies are needed, contact our Water Control Center at 703-228-6555.

IMPORTANT HEALTH INFORMATION

Source water is tested for Cryptosporidium, a parasite that has caused outbreaks of intestinal disease in the U.S. and overseas. It is common in surface water, and even the best water system will contain some live parasites. The U.S. Environmental Protection Agency (EPA) is working to improve the control of microbial pathogens, namely the protozoan Cryptosporidium in drinking water. Cryptosporidium was monitored in the source water quarterly in January, April, July, and October 2023. Cryptosporidium oocysts were not detected in any of the samples. Giardia was monitored in the source water quarterly in January, April, July, and October 2023. Giardia cysts were detected in two samples collected in January and October 2023 at concentrations of 1.40 and 1.36 Cysts/L, respectively. No precaution about County drinking water is currently necessary for the general public.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals 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, Giardia, and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

U.S. Environmental Protection Agency

HOW TO READ THIS TABLE

It's easy! Our water is tested to assure that it is safe and healthy. The results of tests performed in 2023 or the most recent testing available are presented in the table. Footnotes below the chart are provided to explain important details.

The column marked **Goal** shows the Maximum Contaminant Level Goal or MCLG. This is 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.

The column marked **Maximum Allowed** is the Maximum Contaminant Level or MCL. This is 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.

The column marked **Detected Level** shows the results observed in our water during the most recent round of testing.

Source of Substance provides an explanation of the typical natural or man-made origins of the contaminant.

Action Level (AL) is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

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

Maximum Residual Disinfectant Level (MRDL) is the highest level of a residual disinfectant that is allowed in drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG) is the level of a residual disinfectant below which there is no known or expected risk to health. MRDLGs allow for a margin of safety.

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

Nephelometric Turbidity Unit (NTU)—nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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)—one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts per trillion (ppt)—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.

SUMMARY OF 2023 WATER QUALITY DATA[1]

Note: The Willston Zone had one positive samples from 27 samples for total coliform in calendar year 2023. There were no detections of E coli in any of the monthly samples during CY 2023.

Finished water characteristics, treatment plant monitoring[1]

Substance	Units	Goal (MCLG)	Maximum Allowed (MCL)	Detected Level	Range of Levels Detected	Source of Substance
Arsenic[2]	ppb	0	10	0.4	ND - 0.4	Erosion of natural deposits; Runof from orchards; Runoff from glass and electronics production wastes
2,4-D	ppb	70	70	0.6	ND - 0.6	Runoff from herbicide used on row crops
Barium[2]	ppm	2	2	0.04	0.04 - 0.04	Discharge of drilling wastes; Dishcarge from metal refineries; Erosion of natural deposits
Beta/photon emitters[3]**	pCi/L	0	50*	3	1.0 - 3.0	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beta radiation
Combined Radium-226/228[3]	pCi/L	0	5	0.8	ND - 0.8	Erosion of natural deposits
Dalapon	ppb	200	200	1	ND - 1	Runoff from herbicide used on rights of way
Fluoride[2]	ppm	4.0	4.0	0.7	0.7 - 0.7	Erosion of natural deposits; Water additive which promotes strong teeth; Dishcarge from fertilizer and aluminum factories
Gross Alpha Particles[3]	pCi/L	0.0	15.0	2.0	ND - 2.0	Erosion of natural deposits
Nitrate (as Nitrogen)[2]	ppm	10	10	2	ND - 2	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total organic carbon	ppm	N/A	TT	Running annual average removal ratio is required to be equal to or greater than 1.00. Removal ratio actually achieved: ≥1.37 based on running annual averages.		Naturally present in the environment
Turbidity[4]	NTU	N/A	TT	0.07 = highest single hourly measurement. Lowest monthly percentage of samples meeting turbidity requirements = 100%.		Soil runoff

Finished water characteristics, Arlington County distribution system monitoring

Substance	Units	Goal (MCLG)	Maximum Allowed (MCL)	Detected Level	Range of Levels Detected	Source of Substance
Copper[5]	ppm	1.3	AL - 1.3	0.073	0.0048 - 0.106	Corrosion of household plumbing systems; Erosion of natural deposits
Lead[6]	ppb	0	AL - 15	1.818	ND - 2.392	Corrosion of household plumbing systems; Erosion of natural deposits
Chloramines[8]	ppm	(MRDLG) 4	(MRDLG) 4	1.3	0 - 2.94	Water additive used to control microbes
TTHM[8]	ppb	n/a	80	42.5	12 - 48	By-product of drinking water chlorination
HAA5[8]	ppb	n/a	60	28.75	2.2 - 48	By-product of drinking water chlorination

Table Footnotes

[1] All test results are from 2023, unless otherwise noted.

[2] The levels shown for these parameters were derived from both SDWA compliance data and routine process control data. Therefore, they may be different from the compliance values shown in the monthly Washington Aqueduct Water Quality Report.

[3] Triennial radionuclide monitoring was performed in 2023.

[4] Turbidity is the measure of cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of the filtration process. The turbidity level of filtered water shall be less than or equal to 0.3 NTU in at least 95% of the measurements taken each month, and shall at no time exceed 1 NTU.

[5] The Detected Level represents the 90th percentile value. None of the 16 samples tested for copper exceeded the current Action Level of 1.3 ppm. Testing for this parameter was conducted in 2022.

[6] The Detected Level represents the 90th percentile value. None of the 16 samples tested for lead exceeded the current Action Level of 15 ppb. Testing for this parameter was conducted in 2022.

[8] The Detected Level represents the highest running annual compliance average during the calendar year.

* The MCL for beta and photon emitters is 4 mrem/year and EPA considers 50 pCi/L to be the level of concern for beta/photon emitters. Because the beta particle results were below 50 pCi/L, no testing for individual beta particle constituents was required. 40 CFR 141.66(d)(2) specifies average annual strontium-90 concentration of 8 pCi/L and tritium concentration of 20,000 pCi/L assumed to produce a total body or organ dose of 4 mrem/yr.

**The contribution to gross beta (pCi/L) from naturally occuring K-40 isotope is 0.82 times the potassium concentration (mg/L). The concentration of potassium monitored at the Dalecarlia and McMillan WTPs ranged from 2 - 3 mg/L at both WTPs when sampled at the same time as the beta/photon emitter samples. Therefore, the major contributor of gross beta in 2020 may be attributed to naturally occuring K-40.

***Although sodium is not regulated by an MCL, the EPA's Fall 2009 Drinking Water Advisory Table identified 20mg/L as a health-based value for a person on a 500 mg/day restricted sodium diet.

Average Levels of Compounds in Arlington Drinking Water

Compound	Level
Calcium	39 mg/L
Chloramine Residual	1.3 mg/L
Chloride	33 mg/L
Fluoride	0.7 ppm
Total Hardness	135 mg/L or 8 grains/gal
Magnesium	9 mg/L
Nickel	0.4 ppb
pH	7.3
Sodium***	22 ppm
Sulfate	48 mg/L