

2023 Annual Drinking Water Quality Report
City of Archdale
PWS ID# 02-76-030”

Archdale purchases treated water from the Piedmont Triad Regional Water Authority (PTRWA) for distribution to its water customers. The City also maintains interconnections with Davidson Water, Inc. and the City of High Point water systems. In accordance with Federal and State laws, each of these organizations performs extensive testing of its water for contaminants. The City of Archdale also monitors and performs extensive testing of the drinking water that it purchases for distribution to its customers. In addition to these tests, the City of Archdale tests the water it purchases for the following: Bacteria (ten times per month), Total Trihalomethanes/ Haloacetic Acids (quarterly), Lead and Copper (every three years), and Asbestos (every nine years).

If you have questions or would like more information about water distributed by the City of Archdale, you may call Archdale City Hall at 336-434-7341 during the hours of 8:00am - 5:00pm, Monday through Friday. Test results for the City of Archdale’s water are available upon request, and if interested, you may also obtain copies of the PTRWA, Davidson Water, Inc., and City of High Point Consumer Confidence Reports (CCRs) by contacting each of these agencies directly.

Source Water Assessment and Its Availability

The City of Archdale purchases water through the Piedmont Triad Regional Water Authority (PTRWA). The following information was provided by the PTRWA and the conducted assessment was at Randleman Lake. The North Carolina Department of Environmental Quality (DEQ), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducts assessments of all drinking water sources across North Carolina. The purpose of these assessments is to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessments are available in SWAP Assessment Reports that include maps, background information, and a relative susceptibility rating of Higher, Moderate, or Lower. The relative susceptibility rating of the PTRWA intake was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). The assessment findings are summarized in the table below:

<u>SOURCE NAME</u>	<u>INHERENT VULNERABILITY RATING</u>	<u>CONTAMINANT RATING</u>	<u>SUSCEPTIBILITY RATING</u>
Randleman Lake	Moderate	Higher	Higher

It is important to understand that a susceptibility rating of “higher” does not imply poor water quality, only the system’s potential to become contaminated by potential contaminant sources in the assessment area.

The complete SWAP Assessment report for the Piedmont Triad Regional Water Authority may be viewed on the Web at: https://www.ncwater.org/SWAP_Reports/NC3076010_SWAP_Report-20200909.pdf. Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this website may differ from the results that were available at the time this CCR was prepared. If you are unable to access a SWAP report on the web, you may mail a written request for a printed copy to: Source Water Assessment Program - Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to swap@ncdenr.gov. Please indicate the system name, number, and provide your name, mailing address, and phone number. If you have any questions about the SWAP report, please contact the Source Water Assessment staff by phone at 919-707-9098.

Source Water Protection Tips

In North Carolina, stormwater runoff is the number one source of pollution to our surface water. Fertilizer and pesticide applications, automotive maintenance, littering, and improper disposal of pet waste are some of the ways we all contribute to water pollution. As water from rain or melting snow flows over land, it collects harmful pollutants on its journey to the closest storm drain, drainage ditch, or waterway. Though the amount of any particular pollutant might not seem like much, when multiplied by the size of a given community, it can have a major impact on the quality of our water. Proper disposal of waste and elimination of erosion are some of the best ways to protect your water source and ensure a safe environment.

Protection of drinking water is everyone’s responsibility. You can help protect your drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides. They contain hazardous chemicals that can reach your drinking water source.
- Pick up your pet’s waste.

- Dispose of chemicals properly. You can take used motor oil and antifreeze to a recycling center.
- Volunteer in your community. Find a watershed protection organization in your community and volunteer to help. The Piedmont Triad Water Quality Partnership (www.piedmontwaterquality.org) is a collaboration of seventeen local governments in the Piedmont Triad Region working together to educate residents about stormwater and water quality issues in the region and is an excellent resource for learning how you can help address pollution issues in our region.

During 2023 the City received a monitoring violation in February 2023 that covered our first quarter disinfection by-products sampling. We are working with our labs and getting regular sample dates to ensure this does not happen again. There were no health effects for this violation.

Why Are There Contaminants in My Drinking Water?

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).

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).

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: microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; 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; pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; 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; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at 800-426-4791.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 Archdale 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>.

Water Quality Data Table of Detected Contaminants

During the past year we have taken many samples of drinking water according to Federal and State laws. The tables below list all the drinking water contaminants that we detected in the last round of sampling for each particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2023. The EPA and the State allow us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Important Drinking Water Definitions:

- *Not Applicable (N/A)* - Information not applicable/not required for that particular water system or for that particular rule.
- *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 (ug/l)* - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

- *Action Level (AL)* - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- *Maximum Residual Disinfection Level Goal (MRDLG)* - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- *Maximum Residual Disinfection Level (MRDL)* - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- *Maximum Contaminant Level (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 (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.
- *Locational Running Annual Average (LRAA)* - The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.

Extra Note: MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Disinfectant Residuals Summary

REGULATED SUBSTANCES	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	MCL VIOLATION	TYPICAL SOURCE
Total Coliform Bacteria (present or absent)	2023	0	0	0	NA	No	Naturally present in the environment
	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AVERAGE	RANGE LOW-HIGH	MCL VIOLATION	TYPICAL SOURCE
Free Chlorine (ppm)	2023	4	4	1.95	1.09-2.77	No	Water additive used to control microbes
Chloramines (Total Chlorine) (ppm)	2023	4	4	2.36	1.75-3.09	No	Water additive used to control microbes
Haloacetic Acids [HAAs] (ppb)	2023	60	NA	12.8	8.0-35.0	No	By-product of drinking water disinfection
Total Trihalomethanes [TTHMs] (ppb)	2023	80	NA	24.2	21.0-37.1	No	By-product of drinking water disinfection
Total Trihalomethanes (8 sites with a 4 quarter Local Running Annual Average) (mg/L)		Low= 0.020 Last found		High=0.045 LLRA			
B01		0.0149		0.017	11/15/2023		
B02		0.0102		0.010	11/15/2023		
B03		0.0116		0.020	11/15/2023		
B04		0.0103		0.015	11/15/2023		
Total Haloacetic Acids (8 sites with a 4 quarter Local Running Annual Average) (mg/L)		Low= 0.010 Last found		High= 0.041 LLRA			
B01		0.022		0.032	11/15/2023		
B02		0.021		0.029	11/15/2023		
B03		0.027		0.033	11/15/2023		
B04		0.021		0.029	11/15/2023		

	<u>Sample Date</u>	<u>MCL Violation</u>	<u>Your Water</u>	<u>Range Low-High MCLG</u>		<u>MCL</u>	<u>Likely Source of Contamination</u>
Asbestos (MFL)	7/06/20	No	Not Detected	Not Detected	7	7	Decay of asbestos cement water mains

*UNREGULATED SUBSTANCES		<u>RANGE LOW-HIGH</u>
<u>YEAR SAMPLED</u>	<u>AVERAGE</u>	
Perfluorobutanoic acid (PFBA) 2023	0.0058	0.0058
Perfluoropentanoic acid (PFPeA) 2023	0.0095	0.0095
Perfluorohexanoic acid (PFHxA) 2023	0.0089	0.0089
Perfluoroheptanoic acid (PFHpA) 2023	0.0030	0.0030
Perfluorooctanoic acid (PFOA) 2023	0.0048	0.0048
Perfluorobutanesulfonic acid (PFBS) 2023	0.0033	0.0033
Perfluorohexanesulfonic acid (PFHxS) 2023	0.0045	0.0045
Perfluorooctanesulfonic acid (PFOS) 2023	0.0069	0.0069

*Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of monitoring unregulated contaminants is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.

Lead and Copper Contaminants

Contaminant (units)	Sample Date	Your Water	Number of sites found above the AL	MCLG	AL	Likely Source of Contamination
Copper (ppm) (90th percentile)	2020	0.093	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90th percentile)	2020	0.003	0	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

The following are sample results from the Piedmont Triad Regional Water Authority (PTRWA)

<u>Contaminants</u>	<u>MRDLG</u>	<u>MRDL</u>	<u>Water</u>	<u>Low</u>	<u>High</u>	<u>Date</u>	<u>Violation</u>	<u>Typical Source</u>
Disinfectants & Disinfectant By-Products								
(The addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (ppm)	4	4	2.88	2.62	3.15	2023	No	Water additive used to control microbes
Chloramine (ppm)	4	4	2.79	2.70	2.93	2023	No	Water additive used to control microbes

Inorganic Contaminants								
Fluoride (ppm)	4	4	0.71	0.66	0.76	2023	No	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes dental
Turbidity								
Contaminant (units)	Treatment Technique (TT) Violation Y/N	Your Water	MCLG	Treatment Technique (TT) Violation if:	Likely Source of Contamination			
Turbidity (NTU) - Highest single turbidity measurement	N	0.04 NTU	N/A	Turbidity > 1 NTU	Soil runoff			
Turbidity (%) - Lowest monthly percentage (%) of samples meeting turbidity limits	N	100 %	N/A	Less than 95% of monthly turbidity measurements are \leq 0.3 NTU				
* Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU.								

Total Organic Carbon (TOC)							
Contaminants	TT Violation	Your Water (RAA Removal Ratio)	Range Monthly Removal Ratio		MCLG	TT	Typical Source
			Low	High			
Total Organic Carbon (Removal Ratio) – Treated TOC	No	1.49	1.45	1.54	N/A	TT	Naturally present in the environment
Unregulated Contaminants – These samples are generally collected as one time sampling events for special purposes. – These results are for samples collected as the water enters the treatment plant, since the plant does not currently have treatment to remove the contaminants the levels are most likely indicative of the level leaving the treatment plant.							
Contaminant (units)		Year	Your Water (Average if more than 1 sample)		Note		
Perfluorooctanoic acid (PFOA) -ppt		2023	5.8		PTRWA is in the initial stages of beginning a construction project for the installation of advanced treatment. The goal of the advanced treatment project is to bring these emerging contaminants to below the currently proposed regulatory levels.		
Perfluorooctanesulfonic acid (PFOS) - ppt		2023	11				
Perfluorobutanesulfonic acid (PFBS) - ppt		2023	4.1				
Perfluorohexanesulfonic acid (PFHxS) - ppt		2023	6.2				
Perfluoroheptanoic acid (PFHpA) -ppt		2023	3.9				
Perfluorohexanoic acid (PFHxA) - ppt		2023	9.6				
Perfluoropentanoic acid (PFPeA) - ppt		2023	12				
Perfluorobutanoic acid (PFBA) - ppt		2023	3.8				

1,4-Dioxane - ppb	2023	0.94
Unit Descriptions		
Term	Definition	
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.	
Nephelometric Turbidity Unit, NTU	Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.	
Parts per billion, ppb or Micrograms per liter, ug/L	One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.	
Not-Applicable, NA	NA: not applicable	
Non-Detects, ND	ND: Not detected	
Not-Required, NR	NR: Monitoring not required, but recommended.	

Important Drinking Water Definitions	
Term	Definition
Maximum Contaminant Level Goal, 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.
Maximum Contaminant Level, 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.
Treatment Technique, TT	A required process intended to reduce the level of a contaminant in drinking water.
Action Level, AL	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variations and Exemptions	State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
Maximum Residual Disinfection Level Goal, MRDLG	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
Maximum Residual Disinfection Level, MRDL	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

NOTICE TO THE PUBLIC

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Violation Awareness Date: 3-10-23

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the compliance period specified in the table below, we did not complete all monitoring or testing in time for the contaminants listed and therefore cannot be sure of the quality of your drinking water during that time. If you should have any questions, please contact Phillip Yates at 336-434-7364.

CONTAMINANT GROUP**	FACILITY ID NO./ SAMPLE POINT ID	COMPLIANCE PERIOD BEGIN DATE	NUMBER OF SAMPLES/ SAMPLING FREQUENCY	WHEN SAMPLES WERE TAKEN (Returned to Compliance)
(HAA5)- HALOACETIC ACIDS	BO1 AND BO2	FEBUARY 2023	ONCE A QUARTER	3/13/23

(HAA5)- Haloacetic Acids - include Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Monobromoacetic Acid, Dibromoacetic Acid.

What should I do? There is nothing you need to do at this time.

What is being done? There were some shipping delays and lab errors with results that pushed Archdale out of sampling compliance. After Speaking with NCDEQ on 3-10-23, they advised us to retake the two samples that were not in compliance. We took the samples on 3-13-23 and received the samples on 3-21-23. We are back into compliance now. We will work with our lab partners to establish a schedule going forward.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information about this violation, please contact the responsible person listed in the first paragraph of this report.