

# 2019 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 the 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 water are available at Archdale City Hall, 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>
<b>Randleman Lake</b>	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/files/swap/SWAP\\_Reports/3076010\\_9\\_1\\_2017\\_17\\_22.pdf](https://www.ncwater.org/files/swap/SWAP_Reports/3076010_9_1_2017_17_22.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](mailto: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](http://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.

### **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 (EPA) Safe Drinking Water Hotline at 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.

### **Violations that Your Water System Received for the Report Year**

During 2019, no violations received.

### **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 table below lists all the drinking water contaminants that were detected in the last round of sampling for the 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, 2019.**

#### 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.

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 (800-426-4791) or at <http://www.epa.gov/safewater/lead>.”

### Microbiological Contaminants

Contaminant (units)	MCL Violation Y/N	Your Water	MCLG	MCL		Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	0	0	one positive monthly sample		Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (presence or absence)	N	0	0	0 (Note: The MCL is exceeded if a routine sample and a repeat sample for total coliform test positive, and one is also fecal coliform or <i>E. coli</i> positive)		Human and animal fecal waste
Contaminant (units)	Sample Date	Your Water	# of sites found above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) (90 <sup>th</sup> percentile)	July 2018	<0.003	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) (90 <sup>th</sup> percentile)	July 2018	<0.003	0	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

### Inorganic Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low - High	MCLG	MCL	Likely Source of Contamination
Fluoride (ppm)	2019	N	0.6	0.3-0.9	4	4	Erosion of natural deposits; water additive which promotes strong dental health; discharge from fertilizer and aluminum factories

## Disinfectants and Disinfection Byproducts Contaminants

Haloacetic Acids Monitoring Results*				
	<i>Contamination source: byproduct of disinfection</i>			
	(in ppb)	1st quarter	2nd quarter	3rd quarter
	2019	2019	2019	2019
B01	14.3	28.8	13.6	19.2
B02	13.1	12.3	10	14.4
B03	14.2	12.2	10	15.4
B04	13.1	12.3	11.7	12.2
Highest Locational Running Average (Sample Location)	19.6 (B01)	26.8 (B01)	17.5 (B01)	20.2 (B01)
MCL	60	60	60	60
MCL Violation ?	No	No	No	No

\*Reported RAA for quarters 1-3 are based on results from previous quarters not reported on this table.

Total Trihalomethane Monitoring Results*				
	<i>Contamination source: byproduct of disinfection</i>			
	(in ppb)	1st quarter	2nd quarter	3rd quarter
	2019	2019	2019	2019
B01	19.8	37.8	25	33.5
B02	18.8	22.9	21.5	26.9
B03	25.2	24.7	17	26.7
B04	29	17	22	32
Highest Locational Running Average (Sample Location)	25.2(B03)	27.8 (B01)	26.9 (B01)	32.4 (B01)
MCL	80	80	80	80
MCL Violation ?	No	No	No	No

\*Reported RAA for quarters 1-3 are based on results from previous quarters not reported on this table.

## Disinfectant Residuals Summary

	Year Sampled	MRDL Violation Y/N	Your Water (highest RAA)	Range		MRDLG	MRDL	Likely Source of Contamination
				Low	High			
Chlorine (ppm)	2018	N	1.52	0.85	2.04	4	4.0	Water additive used to control microbes
Chloramines (ppm)	2019	N	2.11	1.28	2.73	4	4.0	Water additive used to control microbes