2018 Chesterfield County Rural Water Co. Annual Water Quality Report

Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from?

Our water is purchased from Alligator Water & Sewer (85%), the Town of Cheraw (10%), and Anson County Water (5%). Alligator's water is sourced from wells on: Union Church Road, Sowell Road, US Hwy 1, Hwy 151, Old Creek Road, and Cedar Avenue. Anson County's water is sourced from Blewett Falls Lake and the Town of Cheraw's water source is the Pee Dee River.

Source water assessment and its availability

Our raw water sources are most susceptible to contamination from runoff or environmental conditions.

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 (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. 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.

How can I get involved?

Protection of drinking water is everyone's responsibility. You can help protect your community's 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 after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.

Additional Information 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. Chesterfield County Rural Water Co. 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

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

	MCLG	MCL,	Detect In	Range				
Contaminants	or MRDLG	TT, or MRDL	Your Water	Low	High	Sample Date	Violation	Typical Source
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl2) (ppm)	4	4	.41	.04	2.2	2018	No	Water additive used to control microbes.
Haloacetic Acids (HAA5) (ppb)	NA	60	2 (LRAA)	0	2	2018	No	By-product of drinking water chlorination.
TTHMs [Total Trihalomethanes] (ppb)	NA	80	7 (LRAA)	0	7	2018	No	By-product of drinking water disinfection.

Inorganic Contaminants -	- Alligator	Water	& Sewer					
Sodium (ppm)	NA	NA	2	NA	NA	2018	No	Erosion of natural deposits.
Nitrate [measured as Nitrogen] (ppm)	10	10	1.9	0	1.9	2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Inorganic Contaminants -	- Anson Co	ounty						
Fluoride (ppm)	4	4	.31	.08	1.26	2018	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron (ppb)	NA	NA	1.4	NA	NA	2018	No	Erosion of natural deposits.
Manganese (ppb)	NA	NA	0.12	NA	NA	2018	No	Erosion of natural deposits.
Sodium (ppb)	NA	NA	9.6	NA	NA	2018	No	Erosion of natural deposits.
Sulfate (ppb)	NA	NA	18	NA	NA	2018	No	Erosion of natural deposits.
Inorganic Contaminants -	- Town of	Cheraw	,					
Fluoride (ppm)	4	4	.6	NA	.74	2018	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen] (ppm)	10	10	.48	NA	1.9	2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium (ppb)	NA	NA	15	NA	NA	2018	No	Erosion of natural deposits.
Synthetic Organic Contaminants including pesticides and herbicides – Alligator Water & Sewer								
Dibromochloropropane (DBCP) (ppt)	0	200	48	36	65	2018	No	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.
Synthetic Organic Contaminants including pesticides and herbicides – Town of Cheraw								
Atrazine (ppb)	3	3	.55	NA	NA	2018	No	Runoff from herbicide used on row crops.

Contaminants	MCLG	AL		Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source	
Inorganic Contaminants	Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	.033	2017	0		Corrosion of household plumbing systems; Erosion of natural deposits.	
Lead - action level at consumer taps (ppb)	0	15	1.3	2017	1		Corrosion of household plumbing systems; Erosion of natural deposits.	

Unit Descriptions						
Term	Definition					
ppm	ppm: parts per million, or milligrams per liter (mg/L)					
ppb	ppb: parts per billion, or micrograms per liter (μg/L)					
ppt	ppt: parts per trillion, or nanograms per liter					
NA	NA: not applicable					
ND	ND: Not detected					
NR	NR: Monitoring not required, but recommended.					

Important Drinking Water Definitions						
Term	Definition					
LLRA	LLRA: Locational Running Annual Average					
MCLG	MCLG: Maximum Contaminant Level Goal: 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.					
MCL	MCL: Maximum Contaminant Level: 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.					
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.					
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.					
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.					
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.					
MRDL	MRDL: Maximum residual disinfectant level. 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.					
MNR	MNR: Monitored Not Regulated					
MPL	MPL: State Assigned Maximum Permissible Level					

For more information please contact:

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