## 2017 Annual Drinking Water Quality Report

Rural Water District No.5, Rogers County, OK 1021507, Annual Water Quality Report is for the period of January 1 to December 31, 2017. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. The source of your drinking water is surface water from the Verdigris River and as such the risk of contamination is high. 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 pickup substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which 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 storm water 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 storm water 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 storm water runoff and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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 EPA Safe Drinking Water Hotline at (800) 426-4791.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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). 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. We 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

#### **Definitions**

Maximum Contaminant Level Goal or MCLG: Maximum Contaminant Level or MCL: The level of a contaminant in drinking water below which there is no known or expected health risks. MCLGs allow for a margin of safety. 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 Residual Disinfectant Level Goal or MRDLG:

The level of a drinking water disinfectant below which there is no known or expected health risks. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Action Level Goal (ALG) Action Level (AL) The level of a contaminant in drinking water below which there is no known or expected health risk. ALGs allow for a margin of safety The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

The following tables contain scientific terms and measures, some of which may require explanation.

Ppb or ug/L: Micrograms per liter or parts per billion ó or one ounce in 7,350,000 gallons of water.

Na: Not applicable.

Avg: Regulatory compliance with some MCLs based on running annual averages of monthly samples.

Ppm or mg/L: Milligrams per liter or parts per million ó or one ounce in 7,350 gallons of water.

NTU or Turbidity: Nephelometric turbidity units, the measure of the clarity of water.

# **Regulated Contaminants**

While there was no lead or copper found in raw source water samples, the corrosiveness of our source water in 2016 was evidenced by an exceedance of the Copper Action Level at the 90<sup>th</sup> Percentile. This was not a violation, however additional sampling and monitoring was done to determine treatment practices that will lower the corrosive nature and prevent the leaching of lead and copper from customer plumbing systems into the drinking water. Optimized treatment was accomplished and RWD #5 corrected the exceedance and received DEQ approval on August 28, 2017.

Lead and Copper	Date Sampled	MCLG	Action Level	90 <sup>th</sup> Percei	90 <sup>th</sup> Percentile		# Sites over AL		nits Violation	Likely source of Contamination	
Copper	2017	1.3 mg/L	1.3 mg/L	0.263 mg/L	,	0		ppm	NO	Erosion of natural deposits, leaching from wood preservatives, corrosion of household plumbing systems.	
Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Level Detected	MCLG	MCL	Units	Violat	tion L	ikely Source of	Contaminant	
Chlorine	2017	2	1 ó 2	MRDLG=4	MRDLG=4	ppm	NO	V	Vater additive	to control microbes.	
Chlorite	2017	0.695	0.0592 ó 0.695	0.8	1	ppm	NO	В	By-product of drinking water chlorination.		
Haloacetic Acids (HAA5)	2017	33	22.5 ó 49.8	No goal For total	60	ppb	NO	Е	sy-product of dr	inking water chlorination.	

Total	2017	55	28.1 -83.6		No goal	80		Ppb	NC	)	By-Product of	f drinking water chlorination.
Trihalomethanes					For							
(TTHm)					Total							
Inorganic	Collection Date	Highest I	Level	Rang	ge of Levels		MCLG	MC	_	Units	Violation	Likely Source of Contamination
Contaminants		Detected	Detected		Detected							
Barium	3/13/2013	0.0767	0.0767		.0767 - 0.0767		2	2	2		NO	Discharge from drilling waste, metal refinery, erosion of
												natural deposits.

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

## **Total Organic Carbon**

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set. There were NO Violations.

### Your water is safe to drink!

As our customers, you are invited to attend any of the monthly Board of Directors meetings held the 2<sup>nd</sup> Tuesday night of each month at 7:00 PM at 25254 S. 4100 Rd., Claremore, OK., or the Annual Board of Directors meeting held the 3<sup>rd</sup> Tuesday night of September at 7:00 pm at 25707 S. Hwy 66, Claremore, OK., in the Verdigris Fire Protection District Annex Building. These meetings offer you the opportunity to participate in decisions that may affect your water district. You may also contact Steve Dunavant, District Manager, at the business office located at 25254 S. 4100 Rd, Claremore, OK, or by phone at 918-266-4634. The business office is open Monday through Friday from 8:00 AM until 4:00 PM, closed on most legal holidays. We would also encourage our customers to visit our web site at <a href="https://www.RogersRWD5.com">www.RogersRWD5.com</a>. You can learn about the water district, contact us for questions or service needs and use one of our on-line bill payment methods. The cost of producing safe dependable drinking water continues to rise. The demand for drinking water is also rising. Please conserve water whenever and however possible. This will help control the cost to the consumer and extend one of the single most important resources used by people today. The supply of fresh water suitable for drinking water is limited and our population and demand for water continues to grow. Be a wise water user!

"QUALITY ON TAP"

from

**RURAL WATER DISTRICT NO. 5, ROGERS COUNTY** 

õThis institution is an equal opportunity provider and employer.ö