SPAVINAW WATER SYSTEM ANNUAL DRINKING WATER QUALITY REPORT 2019

(CONSUMER CONFIDENCE REPORT)



he Spavinaw Water System is very pleased to provide you with this year's Drinking Water Quality Report. The water within the Spavinaw system is safe to drink and free of bacteria and harmful substances. We want to keep you informed about the water and services we have delivered to you over the past year. Our goal continues to be to provide a safe and dependable supply of drinking water.

The Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in the public water supply after water treatment. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water sources (for both tap water and bottled water) can include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over and beneath the surface of the land to our source lakes, it dissolves minerals naturally found in rocks and soil. The water can also pick up harmful materials like inorganic or organic chemicals, pesticides, herbicides, radioactive contaminants, and microbial contaminants. These contaminants may be naturally-occurring, as a result of the presence of animals, or as a result of human activity.

The Tulsa Metropolitan Utility Authority routinely monitors for contaminants in Spavinaw's drinking water according to Federal and State laws. This report shows Spavinaw's water quality and a summary of test results of samples taken during 2018. Definitions of unfamiliar terms and abbreviations are provided within the table. If you have any questions about this report or concerning your water utility, please contact Adam Johnson at (918) 589-2460 or by email at adamjohnson@cityoftulsa.org. This report can also be found at www.cityoftulsa.org/government/ departments/water-and-sewer/water-supply/ water-quality/.

The water source for Spavinaw Water System is Spavinaw Lake, a surface water source, located in Mayes County. The Oklahoma Department of Environmental Quality has completed a Source Water Assessment of Spavinaw Lake and has determined that it is moderately susceptible to contamination. For more information about this study or how the ODEQ works to protect source water, contact ODEQ at (405) 702-8100, or visit their website at **www.deq.state.ok.us/wqdnew/sourcewater/index.html**.

Continued on back...



***TERMS AND ABBREVIATIONS**

Some of the terms and abbreviations contained in this report are unique to the water industry and might not be familiar to all customers. Terms used in the table are explained below.

Maximum Contaminant Level (MCL): Highest level of a contaminant allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.

Maximum Level Contaminant 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.

Action Level (AL): Concentration of a contaminant, that if exceeded, triggers treatment or other requirements that a water system must follow.

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

Maximum Residual Disinfectant Level (MRDL): Highest level of a disinfectant allowed in drinking water. There is convincing evidence the addition of disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): Level of a drinking water disinfectant below which there is no known or expected health risk. MRDLGs do not reflect benefit of the use of disinfectants to control microbial contaminants.

Locational Running Annual Average (LRAA): Average calculated at each monitoring location

Parts Per Million (ppm): Equivalent to milligrams per liter. One ppm is comparable to one drop of water in 55 gallons.

Parts per Billion (ppb): Equivalent to micrograms per liter. One ppb is comparable to one drop of water in 55,000 gallons.

Turbidity: A measure of suspended material in water. In the water field, a turbidity measurement is used to indicate clarity of water.

Nephelometric Turbidity Unit (NTU): a unit of turbidity measurement

Standard Unit (s.u.): a measurement of pH



SPAVINAW 2018 WATER QUALITY DATA

This table shows data collected during 2018. Analyses made by professionals after water treatment showed that the levels of all contaminants found were much less than the levels that are cause for concern.

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).

Regulated Contaminants	Level Found	Minimum	Maximum	Maximum Contaminant Level (MCL*)	MCLG*	Violation	Likely Source of Contaminants
Turbidity Level found			0.16	TT*=less than 0.3 NTU* 95 percent of the	NI / A		
Lowest monthly % meeting regs	100%			time	N/A	No	Soil runoff.
Barium**	N/A	N/A	0.048	2 parts per million	2	No	Naturally present in the environment, drilling waste, metal refineries.
Free Chlorine	1.5	0.7	2.1	MRDL*=4.0 parts per million annual avg.	4	No	Water additive to control microbes.
Copper	0.088 parts per million (ppm) at the 90th percentile; 0 sites above AL			AL* = 1.3 ppm at 90th percentile	1.3	No	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives.
Lead	1 part per billion (ppb) at the 90th percentile; 0 sites above AL*			AL* = 15 ppb at 90th percentile	0	No	Corrosion of household plumbing systems, erosion of natural deposits.
Nitrate/Nitrite	1.3	N/A	N/A	Nitrate=10 parts per million; Nitrite=1 part per million	10; 1	No	Naturally occurring, fertilizers, sewage treatment plants, leaching from septic tanks, erosion of natural deposits.
Total Organic Carbon	1.2	0.5	1.7	Results are parts per million. MCL is TT*=percent removal	N/A	No	Naturally found in the environment.
Haloacetic Acids	28	19	35	60 parts per billion LRAA*. Level found is highest LRAA; Minimum and Maximum are from individual readings	N/A	No	By-product of drinking water disinfection.
Total Trihalomethanes	46	31	69	80 parts per billion LRAA*, Level found is highest LRAA; Minimum and Maximum are from individual readings	N/A	No	By-product of drinking water disinfection.

Secondary Contaminants	Average	Minimum	Maximum	Recommended Level (Non-Health Based Standards)	Likely Source of Contaminants
рН	7.7	6.8	8.5	Aesthetic level 6.5-8.5 s.u.*	Measure of acidity. Naturally present, adjusted in drinking water treatment.
Other Required Monitoring	Average	Minimum	Maximum	Recommended Level	Likely Source of Contaminants
Sodium***	8.16	N/A	N/A	Results are in Parts Per Million. Standard has not been established	Naturally occurring, urban stormwater runoff or discharge from sewage treatment plants.

**Data collected March 2013. Monitoring frequency is in compliance with regulation.

*** Data collected summer 2015. Monitoring frequency is in compliance with regulation.



IMPORTANT HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 microbiological 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. The Spavinaw Water System 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 **www.epa.gov/safewater/lead**.

THE TULSA METROPOLITAN UTILITY AUTHORITY INVITES YOU TO GET INVOLVED

The Tulsa Metropolitan Utility Authority is the governing board that oversees Spavinaw's Water System. Meetings that deal with decisions about our water are held on the second and fourth Wednesdays of the month. Agendas are posted on the electronic marquee in the Tulsa City Hall entry at 2nd and Cincinnati, and online at **www.cityoftulsa.org/government/meeting-agendas**.

We encourage our customers to participate in the decisions that affect the quality of our drinking water. For more information about meetings, call (918) 596-1824 or write to TMUA, 175 East 2nd Street Suite 1400, Tulsa, OK 74103.

TMUA MEMBERS

Louis Reynolds, Chair Jack Neely Richard Sevenoaks Candice Cheeseman Jim Cameron Rick Hudson Mayor GT Bynum www.cityoftulsa.org/TMUA

www.cityoftulsa.org/government/authorities-boards-and-commissions

