

CITY OF SAPULPA

2017 CONSUMER CONFIDENCE REPORT

PWSID #OK1020404

918/224-5006

The City of Sapulpa has been providing clean water to the community; from the Water Treatment Plant located on Sahoma Lake Road at Sahoma Lake since 1992, helping to keep you and your family healthy. The City of Sapulpa is pleased to share this water quality report with you. It describes to you, the customer, the quality of your drinking water. This report covers January 1 through December 31, 2017. The City of Sapulpa's drinking water supply strived to meet the strict regulations of both the State of Oklahoma and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to prepare reports like this every year.

In 2017 our water department delivered 910,586,000 gallons of water to our customers. Sapulpa relies on surface water from Lake Sahoma which is located about four miles northwest of the city, and Lake Skiatook which is located about 25 miles north of the city.

As required by the 1996 Safe Drinking Water Act Amendments, the Oklahoma Department of Environmental Quality completed a Source Water Assessment Plan (SWAP), Sahoma Lake, for our system. The report included a delineation of areas surrounding our water source, an inventory of the regulated and unregulated drinking water contaminants within the delineated area, and a determination of the system's relative susceptibility to contamination. The report showed a HIGH vulnerability for contamination. The SWAP also provides information on potential sources of contamination. The rating reflects the potential for contamination of source water, not the existence of contamination. A full report is available upon request.

Sapulpa treats your water using disinfection and filtration to remove or reduce harmful contaminants that come from the source water. Ultra-Super Pulsator Clarifiers and multimedia rapid filtration filters are used to treat the water, and Sodium Hypochlorite is used to disinfect the

water. However; in 2018, we are contracting with a consultant in order to complete an evaluation to convert over to Chloramines as our primary disinfectant.

For more information about your drinking water and for opportunities to get more involved, please contact the Sapulpa Water Treatment Plant by calling 918/224-5006, or by writing to the following address: PO Box 1130, Sapulpa, OK 74067. Also, you are welcomed and encouraged to attend public meetings on the 1st and 3rd Mondays of each month at 7 PM located at City Hall at 425 E Dewey.

Source of Drinking Water

The sources of drinking water (both tap 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.

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's Safe Drinking Water Hotline (1-800-426-4791).

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 regulations establish limits for contaminants in bottled water that 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 (1-800-426-4791).

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 <http://www.epa.gov/safewater/lead> .

We realize that some of our customers may actually be receiving water that is supplied by the City of Tulsa. Following is a link to their water quality report https://www.cityoftulsa.org/media/7647/2018_annualwaterqualityrpt.pdf .

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 metal, 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 process 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.

Definitions:

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.

Maximum Residual Disinfectant 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 Disinfectant 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.

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

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

90th Percentile: 90% of samples are equal to or less than the number in the chart.

NTU (Nephelometric Turbidity Units): A measure of clarity.

NA: Not applicable.

ND: Not detectable at testing limits.

PPB (parts per billion): micrograms per liter (ug/L), or one ounce in 7,350,000 gallons of water.

PPM (parts per million): milligrams per liter (mg/L), or one ounce in 7,350 gallons of water.

pCi/L (picocuries per liter): a measure of radioactivity.

SU: Standard Unit.

HARA: Highest Annual Running Average.

Ug/L: Micrograms per liter which equals parts per billion.

CDC: Center for Disease Control.

EPA: Environmental Protection Agency.

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

Level 1 Assessment: A level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E-coli MCL violation has occurred and/or why total coliform bacterial have been found in our water system on multiple occasions.

mrem: Millirems per year (a measure of radiation absorbed by the body).

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2017	1	1 - 1	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes
Haloacetic Acids (HAA5)	2017	23	16.9 - 34.1	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Not all 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 Trihalomethanes (TTHM)	2017	77	45.5 - 87	No goal for the total	80	ppb	Y	By-product of drinking water disinfection
Not all 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.								
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate (measured as Nitrogen)	2017	0.2	0.2 - 0.2	10	10	ppm	N	Runoff from fertilizer use, Leaching from septic tanks, sewage, Erosion of natural deposits
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	6/19/2013	3.23	3.23 - 3.23	0	4	mrem/yr	n	Decay of natural and man-made deposits
Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percential	# Sites over AL	Units	Violation	Likely Source of Contamination
Copper	9/25/2015	1.3	1.30	0.17	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	9/25/2015	0	0.015	< 0.0050	0	ppm	N	Corrosion of household plumbing systems. Erosion of natural deposits
Total Organic Carbon								
The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.								

Unregulated Contaminants

Sapulpa was required to participate in Unregulated Contaminants Monitoring (UCMR3) in 2014. Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminants monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. The following are those contaminants that were detected during our UCMR3 monitoring.

Unregulated Contaminant	Average (parts per billion)	Minimum (parts per billion)	Maximum (parts per billion)
Chlorate	431	128	1120
Chromium	0.224	0.219	0.229
Chromium, Hexavalent	0.0776	0.0439	0.105
Strontium	242	230	257
Vanadium	0.317	0.317	0.317

Violations Table

Total Trihalomethanes (TTHM)			
Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
Failure Submit OEL Report For TTHM	12/30/2016	3/22/2017	We failed to submit our operational evaluation level (OEL) report to our regulator. The report is needed to determine best treatment practices necessary to minimize possible future exceedences of TTHM.
MCL, LRAA	1/1/2017	3/31/2017	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, LRAA	4/1/2017	6/30/2017	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, LRAA	7/1/2017	9/30/2017	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

Water Plant In-House Testing

	pH	Fluoride	Hardness	Alkalinity	Chlorine	Turbidity	Iron	Aluminum	Manganese	Phosphate	Chloride
Max	7.63	1.28	95	88	3.1	0.282	0.023	0.006	0.253	0.848	60
Min	6.21	0	65	51	1	0.059	0.008	0	0.004	0	40
Average	7.02	0.506	78.715	67.229	1.437	0.138	0.015	0.003	0.084	0.434	42