

City of Osage City

Water Consumer

Confidence Report

For 2019

City Council Meetings

Second and Fourth Tuesdays, 7 p.m.

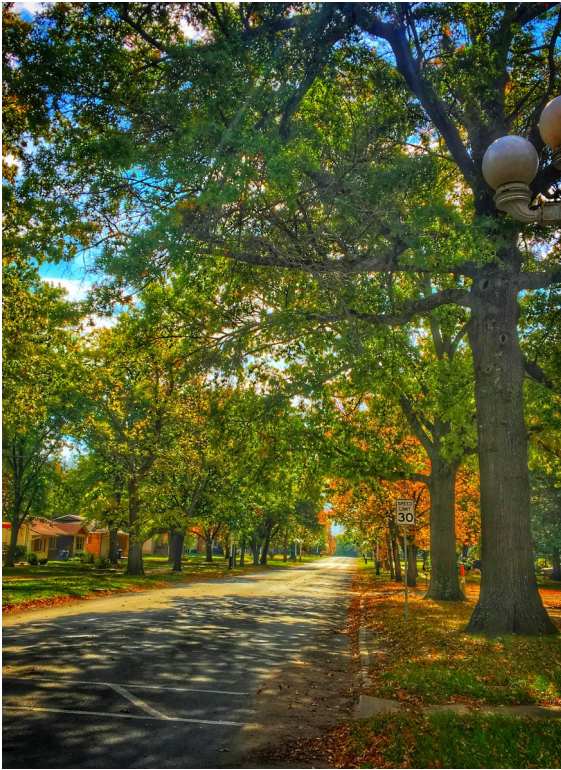
221 South 5th Street

City Hall

201 South 5th Street

Osage City, Kansas 66523

(785) 528-3714



NEIGHBORHOOD WATER WATCH PROGRAM

In the on going process of producing and supplying a quality finished product (drinking water), the City of Osage City is committed to maintaining the safety and integrity of our water system. To assist us in these efforts, we are asking you as neighbors, to help us by reporting any suspicious or unusual activity, persons or vehicles at or around the City Lake, Water Tower, Water Treatment Plant, fire hydrants or any of our other facilities.

Please Call 785-528-3714 to report these activities.

ABOUT YOUR WATER SYSTEM

Water Production

Primary Water Supply: Melvern Lake
Secondary Water Supply: Osage City Lake
The raw water intake is located at Melvern Lake. Capacity is 2-150 HP
Pumps capable of delivering 1,200 gpm.

Water Distribution

Original Construction in 1910
1,287 Meter Connections
198 Fire Hydrants
31 Miles of Distribution Water Mains
Only 3 Miles of Cast Iron Remains
Average System Static Pressure: 52 psi
Average Monthly Residential Water Use:
3,295 Gallons

As part of our continuing commitment to quality, the City of Osage City has joined with the United States Environmental Protection Agency and the Kansas Department of Health and Environment to assure our community a continued safe drinking water supply.

Osage City's source of water is provided by surface water, with our primary water supply coming from Melvern Lake. It is located approximately 10 miles south of Osage City. The Osage City Lake serves as a secondary water supply, in times of need. A source water assessment has been completed and is available upon request. Or you may view it online at: www.kdheks.gov/nps/swap/SWreports.html

During the 2019 calendar year, we had one violation of drinking water standards.

The City of Osage City has five state certified water treatment operators on staff, with more than 60 years of combined experience, to ensure that you have an uninterrupted and safe supply of potable water.

Lead and Copper Testing:

Most recent test results (9/15/2017)

Lead AL = 15 ppb Copper AL = 1.3 ppm

90th percentile lead value 13.23 ppb

90th percentile copper value .991 ppm

The City of Osage City will continue triennial sampling for lead and copper.

Water Treatment Plant

Original Construction in 1910
Present Plant Constructed in 1974
Major Improvements in 1986, 2003
Plant Capacity: 1.6 Million Gallons Per Day
Total Population Served: 5,894
5 State Certified Operators on Staff

Wholesale Water Sales

Water is Distributed to Other Entities such as: Osage County RWD #6 & #7, Reading, Burlingame, and Harveyville

In 2019, Osage City supplied 81,722,000 gallons to these entities

Water Tower

Constructed in 1968
Capacity: 500,000 Gallons
Diameter: 50 Foot, Bowl Height: 37 foot
Overall Height: 138 Foot

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 radiological material and can pick up substances resulting from the presence of animals or from human activity.

Total Organic Carbon (TOC) has no direct health effects. However, TOC provides a medium for formation of disinfection byproducts. These byproducts include THMs and HAA5s. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver, or kidney problems, nervous system effects, and may lead to an increased risk of getting cancer.

The required combined chlorine residual in a distribution system is: a minimum of 1.0 mg/l and a maximum of 4.0 mg/l running annual average. Our highest chlorine residual was 3.8 mg/l, our average was 2.75 mg/l and our lowest was 1.9 mg/l.

Atrazine is a widely used herbicide that controls weeds in agricultural production.

MCL = 3.0 ppb

Highest value = .62 ppb

Annual sample taken did not exceed MCL

Organic Contaminants

Contaminant	MCLG	MCL	Results	Date Tested	Likely Source of Contamination
Atrazine	3ppb	3 ppb	2.4 ppb	5/9/19	Runoff from Agricultural Herbicide

Inorganic Contaminants

Contaminant	MCLG	MCL	Results	Date Tested	Likely Source of Contamination
Barium	2 ppm	2 ppm	.049 ppm	5/7/19	Discharge from metal refineries
Chromium	100 ppb	100 ppb	<1.0 ppb	5/7/19	Discharge from steel and pulp mills
Flouride	4 ppm	4 ppm	.64-.88 ppm	7/17/19	Natural deposits, water additive which promotes
Nitrate	10 ppm	10 ppm	.45 ppm	5/11/19	Runoff from fertilizer use
Contaminant	MCLG	MCL	Highest RAA	Detected Range	Date Tested
Total Haloacetic Acids	0	60	27 ug/L	27 ug/L	2019
Total Trihalo-methanes	0	80	41 ug/L	41 ug/L	2019

The typical source for all secondary contaminants is erosion of natural deposits. **The following secondary contaminants are not presently regulated.**

Secondary Contaminants	MCLG	SMCL	Highest Detected	Date Tested
Alkalinity as CaCO ₃	N/A	300 ppm	110 Mg/L	5/9/19
Aluminum	N/A	.05	.015 MG/L	5/7/19
Calcium	N/A	200	41 MG/L	5/7/19
Chloride	N/A	250 ppm	10 MG/L	5/11/19
Corrosivity	N/A	0	-.41 LSI	5/7/19
Magnesium	N/A	150 ppm	8.6 MG/L	5/7/19
Manganese	N/A	.05 ppm	.0015 MG/L	5/7/19
Metolachlor	N/A		.75 ppb	6/13/17
Conductivity @ 25 UMH		1500	340	5/9/19
Potassium	N/A	100 ppm	3.2 MG/L	5/7/19
Silica	N/A	50 ppm	4.7 MG/L	5/7/19
pH	N/A	8.5	7.6	5/9/19
Sodium	N/A	100 ppm	9.3 ppm	5/7/19
Specific Conductivity	N/A	1500 umho/cm	340 umho/cm	5/9/19
Sulfate	N/A	250 ppm	31 MG/L	5/11/19
T.D.S.	N/A	500 ppm	170 MG/L	5/11/17
Total Hardness	N/A	400 ppm	140 MG/L	5/7/19
Total Phosphorus	N/A	N/A	.031 MG/L	5/16/19
Raw T.O.C.	N/A	N/A	4.7 mg/L	RAA

Many other contaminants such as these listed may also enter our source water supplies, bringing their own challenges. 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 supply systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 (800-426-4791). Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer under going chemotherapy, persons who have undergone organ transplants and 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).

Infants and children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. Your 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 (800-426-4791) or at epa.gov/safewater/lead.

Coliform bacteria in the water is an indicator that pathogens may be present. **Samples required** – 4 per month. **Results**– No positive samples in 2019.

Contaminants that may be present in source water include: **Microbial Contaminants**, such as viruses from bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife. Microbiological quality, bacteria and viruses are controlled by chlorine residuals throughout the treatment plant and distribution system.

TERMS AND ABBREVIATIONS

Maximum Contaminant Level Goal (MCLG): the "goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health.

Maximum Contaminant Level (MCL): highest level allowed of a contaminant in drinking water.

Secondary Maximum Contaminant Level (SMCL): recommended level not regulated and has no MCL.

Action Level (AL): concentration of a contaminant, if exceeded, triggers treatment or other requirements.

Treatment Technique (TT): required process intended to reduce levels of contaminant in drinking water.

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

Running Annual Average (RAA): Average of sample results over 12 months used to determine compliance with MCLs.

Inorganic Contaminants: such as salts and minerals which can be naturally occurring or result from urban storm water runoff, industrial or domestic sewer discharge, oil and gas production and farming.

Pesticides and Herbicides: which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.

Non Detects (ND): lab analysis indicates contaminant not present.

Parts Per Million (ppm): or milligrams per liter (mg/l)

Parts Per Billion (ppb): or micrograms per liter (ug/l)

Picocuries Per Liter (pCi/l): radioactivity in water

Millirems Per Year (mrem/yr): radiation absorbed by the body.

Monitoring Period Average (MPA): average of sample results obtained during a defined time frame, (Monthly, Quarterly, Yearly)

Nephelometric Turbidity Unit (NTU): measure of clarity of water. Turbidity in excess of 5 NTU is noticeable to the average person. Turbidity is not regulated for groundwater systems.

Locational Running Annual Average (LRAA): average of sample analytical results taken at a particular location during previous four calendar quarters.

Organic 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. Radiological Quality Testing: MCL = 15 pCi/L

Highest Sample = <3 pCi/L Next Test: 2020