



City of Arkansas City 2018 Consumer Confidence Report

Covering Year: 2017



The City of Arkansas City presents the 2018 Consumer Confidence Report. This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and State standards. We are committed to providing you with information because informed customers are our best allies. It is important that customers be aware of the continued efforts that are made to improve their water systems. During the 2017 calendar year, we had no violations of drinking water regulations.

To learn more about your drinking water, please attend any of the city commission meetings which are held on the first and third Tuesdays of each month at City Hall at 5:30pm. The public is welcome. Meeting agendas and relevant information are provided on local cable TV on channel 7. Other announcements can be found in the Arkansas City Traveler and heard over KSOK 1280 AM, 95.9 FM or KACY 102.5 FM radio. Further information is available on the City of Arkansas City's web site at: <http://www.arkcity.org>.

Your water is supplied by 10 ground water wells west of the Arkansas River. A surface water supply is also available from the Walnut River on the east side of town, but for the last several years only the water well source has been utilized. The water treatment facility is permitted to soften and filter the source water at a rate up to 7 million gallons per day. The average water quantity delivered to customers in 2017 was 2.7 million gallons per day.

Important Information from the EPA

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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).

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. Your water is treated to remove several contaminants and a disinfectant is added to protect you against microbial contaminants.

Terms & 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. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): the "Maximum Allowed" MCL is 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.

Secondary Maximum Contaminant Level (SMCL): recommended level for a contaminant that is not regulated and has no MCL.

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

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

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.

Non-Detects (ND): lab analysis indicates that the contaminant is not present.

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

Parts per Billion (ppb) or micrograms per liter (µg/l)

Picocuries per Liter (pCi/L): a measure of the radioactivity in water.

Millirems per Year (mrem/yr): measure of radiation absorbed by the body.

Monitoring Period Average (MPA): an average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

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

Running Annual Average (RAA): an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

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

Contaminants that may be present in source water before we treat it include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, 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 storm water run-off, agriculture, and residential users.

Radioactive contaminants, which can be naturally occurring or the result of mining activity.

Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

Water Quality Data Table

Please Note: Because of sampling schedules, results may be older than 1 year.

Microbiological	Results	MCL	MCLG	Typical source
COLIFORM (TCR)	Month of August 3 returned as positive	MCL: Systems that Collect Less than 40 Samples per Month-No more than 1 positive monthly sample	0	Naturally present in the environment

Additional Information: Our water system tested a minimum of 10 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliforms are bacteria that are naturally present in the environment and used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found Coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment (s) to identify problems and to correct any problems that were found during these assessments.*During the past year we were required to conduct one Level 1 assessment. One level 1 assessment was completed. In addition we were required to take one corrective action and we completed one of the action.

Water Quality Data Table (continued)

Please Note: Because of sampling schedules, results may be older than 1 year.

Regulated Contaminants	Sample Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ARSENIC	4/6/2015	1.4	1.4	ppb	10	0	Erosion of natural deposits
BARIUM	4/6/2015	0.055	0.055	ppm	2	2	Discharge from metal refineries
FLUORIDE	4/18/2017	0.4	0.27 0.4	ppm	4	4	Natural deposits; Water additive which promotes strong teeth
NITRATE	1/11/2017	0.9	0.9	ppm	10	10	Runoff from fertilizer use
SELENIUM	04/6/2015	3.6	3.6	ppb	50	50	Erosion of natural deposits

Disinfection Byproducts	Monitoring Period	Your Highest RAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS	2017	20	6.3-23	ppb	60	0	By-product of drinking water disinfection
TTHM	2017	53	20-62	ppb	80	0	By-product of drinking water chlorination

Additional Information: Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

Lead & Copper	Monitoring Period	90th Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2013-2015	0.013	0.0011-0.045	ppm	1.3	0	Corrosion of household plumbing
LEAD	2013-2015	1.4	1.2-2.7	ppb	15	0	Corrosion of household plumbing

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

RADIOLOGICAL CONTAMINANTS	COLLECTION DATE	YOUR HIGHEST VALUE	RANGE (low/high)	UNIT	MCL	MCLG	TYPICAL SOURCE
COMBINED RADIUM (-226 & -228)	1/06/2014	0.5	0.5	PCI/L	5	0	Erosion of natural deposits

Secondary Contaminants	Sample Date	Our Highest Value	Range (low/high)	Unit	SMCL
ALKALINITY, TOTAL	4/6/2015	44	44	MG/L	300
ALUMINUM	4/6/2015	0.02	0.02	MG/L	0.05
CALCIUM	4/6/2015	28	28	MG/L	200
CHLORIDE	4/6/2015	220	220	MG/L	250
CONDUCTIVITY @ 25 C UMHOS/CM	4/6/2015	1000	1000	UMHO/CM	1500
CORROSIVITY	4/6/2015	0.41	0.41	LANG	0
HARDNESS, TOTAL (AS CaCO3)	4/6/2015	140	140	MG/L	400
IRON	4/6/2015	0.011	0.011	MG/L	0.3
MAGNESIUM	4/6/2015	17	17	MG/L	150
MANGANESE	4/6/2015	0.0076	0.0076	MG/L	0.05
NICKEL	4/6/2015	0.0011	0.0011	MG/L	0.1
PH	4/6/2015	8.9	8.9	PH	8.5
PHOSPHORUS, TOTAL	4/6/2015	0.34	0.34	MG/L	5
POTASSIUM	4/6/2015	6.2	6.2	MG/L	100
SILICA	4/6/2015	12	12	MG/L	50
SODIUM	4/6/2015	140	140	MG/L	100
SULFATE	4/6/2015	93	93	MG/L	250
TDS	4/23/2014	620	620	MG/L	500
ZINC	4/6/2015	0.16	0.16	MG/L	5