City of Moundridge

– Water Quality Report *(covers calendar year 2017)*

This pamphlet lists water quality information for the City of Moundridge. It includes limited details on the source and quality parameters and how our water compares to Environmental Protection Agency (EPA) and state standards. It's important that customers be aware of the efforts that are made continually to improve their water system. To learn more, please attend any of the regularly scheduled meetings that are held on the first Monday of the month at 5:45 p.m. at 225 S. Christian Ave., in Moundridge. For more information, please contact Terry Jantzen at 620/345-8246.

The water source for Moundridge is from wells. The water is treated to remove contaminants. A disinfectant is also added to protect the water supply against microbial contaminants.

A message from EPA

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. The city treats water according to EPA's regulations. Food and Drug Administration 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).

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.

Contaminants that may be present in source water before treatment may 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 stormwater 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 and residential uses.
- **Radioactive contaminants**, which are naturally occurring.
- **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 stormwater runoff, and septic systems.
- **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 thirty seconds to two 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.
- **Total Coliform Rule (TCR)**: Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. During 2017, the utility collected two samples per month.

Water Quality Data

The table on the reverse side lists all the drinking water contaminants that we detected during the 2017 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless noted, the data presented in this table is from testing done January 1 - December 31, 2017. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old. The bottom line is that the water that is provided to you is safe.

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 allowed in drinking water. MCLs are set as close to the MCLGs as feasible using 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.
- Technique (TT): A required process intended to reduce levels of a 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 a disinfectant is necessary for control of microbial contaminants.
- Non-Detects (ND): Lab analysis indicates 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.
- 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 ground water systems.
- Running Annual Average (RAA): Average of sample results obtained over the most current 12 months and used to determine compliance with MCLs

Testing Results for the City of Moundridge

The city of Moundridge provides excellent water quality. The city tested for disinfection byproducts in August whereas the test should have been conducted in July. See the explanation on the next page.

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ARSENIC	3/15/2017	9.5	5.7 - 9.5	ppb	10	0	Erosion of natural deposits
ATRAZINE	11/13/2017	0.16	0.062 - 0.16	ppb	3	3	Runoff from herbicide used on row crops
BARIUM	3/15/2017	0.41	0.14 - 0.41	ppm	2	2	Discharge from metal refineries
CHROMIUM	3/15/2017	2.7	2.3 - 2.7	ppb	100	100	Discharge from steel and pulp mills
FLUORIDE	3/15/2017	0.29	0.18 - 0.29	ppm	4	4	Natural deposits; Water additive which promotes strong teeth.
NITRATE	5/22/2017	9.1	2.2 - 9.1	ppm	10	10	Runoff from fertilizer use
SELENIUM	3/15/2017	4.1	3.4 - 4.1	ppb	50	50	Erosion of natural deposits

Disinfection Byproducts	Monitoring Period	Highest RAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	2016	3	2.6	ppb	60	0	By-product of drinking water disinfection
TTHM	2016	8	7.7	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90th Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2015 - 2017	1.4	0.029 - 1.5	ppm	1.3	2	Corrosion of household plumbing

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
ALKALINITY, TOTAL	12/12/2017	230	180 - 230	MG/L	300
CALCIUM	12/12/2017	89	77 - 89	MG/L	200
CHLORIDE	3/15/2017	45	41 - 45	MG/L	250
CONDUCTIVITY @ 25 C UMHOS/CM	12/12/2017	770	630 - 770	UMHO/CM	1500
CORROSIVITY	3/15/2017	-0.018	-0.067 - -0.018	LANG	0
HARDNESS, TOTAL (AS CACO3)	3/15/2017	250	240 - 250	MG/L	400
MAGNESIUM	3/15/2017	12	8.9 - 12	MG/L	150
PH	12/12/2017	7.6	7.3 - 7.6	PH	8.5
PHOSPHORUS, TOTAL	3/15/2017	0.65	0.13 - 0.65	MG/L	5
POTASSIUM	3/15/2017	3.7	2.4 - 3.7	MG/L	100
SILICA	12/12/2017	26	25 - 26	MG/L	50
SODIUM	3/15/2017	40	25 - 40	MG/L	100
SULFATE	3/15/2017	35	26 - 35	MG/L	250
TDS	3/15/2017	370	370	MG/L	500

Please Note: Because of sampling schedules, several results are more than one year old.

While the drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

City of Moundridge
225 S Christian Ave ~ PO Box 636
Moundridge, KS 67107-0636

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
Monitoring requirements not met for the City of Moundridge

The City of Moundridge failed one monitoring requirement. Even though this was not an emergency, as our customers you have the right to know what happened and what we did to correct the situation.

The City is required to monitor the drinking water for specific contaminants on a regular basis. Results of the regular monitoring are an indication of whether or not our drinking water meets health standards.

During year 2017 the city was required by federal regulations to sample the water for disinfection byproducts of Haloacetic acids (HAA) and total trihalomethanes (TTHM) in the month of July. The city inadvertently sampled in August instead of July.

The maximum contaminant level for Haloacetic acids is 60 ug/l.
The August sample had 2.5 ug/l.

The maximum contaminant level for trihalomethanes is 80 ug/l.
The August sample had 7.7 ug/l.

These are very low levels of these contaminants. The city samples from the prior years also had very low levels.

Year	HAA	TTHM
2014	3.2ug/l	12 ug/l
2015	none detected	7.8 ug/l
2016	2.6 ug/l	7.7 ug/l

The City of Moundridge drinking water is very high water quality.

Based on the past sample results and other groundwater supplies in Kansas, it is the city's opinion and the Kansas Rural Water Association's opinion that the HAA and TTHM is the city's August sample would have been just as low and excellent if the water sample had been taken in July.

What should I do?

You do not need to use an alternative (e.g., bottled water) water supply. However, if you have a specific health concerns, consult your doctor.

What does this mean?

This is not an immediate risk. If it had been you would have been notified immediately. *However, some people who drink water containing trihalomethanes and /or Haloacetic acids in excess of the MCL over many years may experience problems with there liver, kidneys, or central nervous systems, and may have a increased risk of getting cancer.* the results of the test taken in August of 2017 were well below the MCL.

What happened? What is being done?

The City of Moundridge took the test in August 2017 not in July of 2017 as required by KDHE. This test will be taken in July of 2018.

We anticipate resolving the problem with the next test to be taken in July of 2018

For more information, please contact the following
Randy Frazer Phone 620-345-8246
or by mail: 225 South Christian Ave, PO box 636, Moundridge KS 67107

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly
(for example, people in apartments, nursing homes, schools, and businesses).
You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by the City of Moundridge
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