City of Wellington, KS

CONSUMER CONFIDENCE REPORT – 2018

Covering Calendar Year 2017

This brochure is a snapshot of the quality of the water that we provided last year. We are committed to providing you with this information because informed customers are our best allies. 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 City Council meetings, which are held on the 1st and 3rd Tuesday of every month at 6:30pm at the City Administration Center. For more information, please contact Mike Clift, Water Production supervisor (620-434-5353), or visit our web site www.cityofwellington.net.

This report is divided into five basic sections: Source Water, Water Treatment, Water Distribution System, Message from EPA and Water Quality Data.

Source Water

Your water is treated to remove several contaminates and a disinfectant is added to protect you against microbial contaminants. The Safe Drinking Water Act (SDWA) required states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. The state has completed an assessment of our source water. For results of the assessment, please contact us or view on-line at: http://www.kdheks.gov/nps/swap/SWreports.html.

The City of Wellington treated and sent approximately 415 million gallons of water to town in 2017. Of this total, about 78% came from Wellington Lake and about 22% came from our 9 groundwater wells.

Water Distribution System

- The Water Plant has four vertical turbine pumps that pump the treated water from the Treatment Plant to the City's million gallon elevated water tower near the intersection of 15th and "A" Streets. A second, half million gallon elevated water tower is located near Worden Park.

- The distribution system pressure, when the Plant is pumping the treated water to town, is around 60 psi. When the Plant is not pumping the treated water to town, the system pressure is reliant on the elevation of the treated water in the City's elevation water towers. Depending on a variety of factors such as distance from the towers, distribution line size and relative elevation, the system pressure varies from approximately 40 psi to approximately 60 psi.

- There is a 1.8 million gallon underground clearwell located at the Treatment Plant.

The City of Wellington provided treated water to the following public water suppliers in 2017:

RWD #1	11,600,000 gallons	2.79% of total

RWD #2	13,419,000 gallons	3.23% of total
RWD #3	2,518,000 gallons	0.60% of total
City of Mayfield	2,353,000 gallons	0.56% of total

The City also supplies treated water to the Kansas Turnpike Authority's Belle Plaine Service Area.

Message from EPA

Some people may be more vulnerable to contaminates 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.

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, agricultural 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 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 contaminates, 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limits the amount of certain contaminants in water provided by public water systems, we treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminates in bottled water, which must provide the same protection for public health.

Our water system tested a minimum of 9 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presences 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.

Water Quality Data

The tables following below list all of the drinking water contaminants, which were detected during the 2017 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the 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 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.

Testing Results for: City of Wellington

Microbiological	Result	MCL	MCLG	Typical Source
COLIFORM (TCR)	In the month of July, 2 sample returned as positive	MCL: System that Collect Less Than 40 Samples Per Month – No more than 1 positive monthly sample	0	Naturally Present in the environment

Regulated Contaminants	Collection Date	Your Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ARSENIC	5/10/2017	1.3	1.3	ppb	10	0	Erosion of natural deposits
ATRAZINE	6/18/2017	0.48	0.48	ppb	3	3	Runoff from herbicide used on row crops
BARIUM	5/10/2017	0.049	0.049	ppm	2	2	Discharge from metal refineries
FLUORIDE	4/3/2017	1.1	0.65 - 1.1	ppm	4	4	Natural deposits; water additive which promotes strong teeth
NITRATE	5/10/2017	2.9	2.7 – 2.9	ppm	10	10	Runoff from fertilizer use
SELENIUM	5/10/2017	3.3	3.3	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 (HAA5)	2017	32	20 – 38	ppb	60	0	By-product of drinking water disinfection
TOTAL TRIHALOMETHANES (TTHMs)	2017	88	46 - 100	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	0.016	0.0013 - 0.049	ppm	1.3	0	Corrosion of household plumbing
LEAD	2015	2.6	1.1 – 3.8	ppb	15	0	Corrosion of household plumbing

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.

Unresolved Deficiency Date Identified	Facility	Comments
09/24/2015	Combine Raw Source	As you know, the City of Wellington Public Water Supply continues to serve raw water to a number of connections between the Wellfield and the water treatment plant. You submitted a timeline for meeting with the raw water recipients by November 30th, 2015, to decide between the available options to resolve this deficiency. Please notify the South Central District Office by December 10th, 2015, with the results of your meeting and the date you will correct the deficiency by no longer providing raw water to customers.
09/24/2015	TP003	It was discovered during the September 24, 2015 city of Wellington Public Water Supply inspection that the raw water line coming into the plant has a direct cross connection to a finished water distribution line within the treatment plant. During the inspection the connection was described as a way to maintain pressure in the raw well water line to serve customers on the raw water line when the plant and wells are shut down at night. The connection is equipped with a diaphragm valve which does not provide backflow protection. A KDHE approved backflow preventing device needs to be installed at this connection or apply an approved alternative solution to eliminate

		the cross connection. (The City of Wellington has permanently removed this cross connection from there system and is now in compliance with KDHE.)

Total Organic Carbon Lowest Month for Removal	Number of Samples	Actual Removal Ratio	Required Removal Ratio	Lowest Monthly Removal Ratio
8/1/2017 – 8/31/2017	12	1.09	1.0 RATIO	0.79

Secondary Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
ALKALINITY, TOTAL	5/10/2017	43	43	MG/L	300
ALUMINUM	5/10/2017	0.5	0.5	MG/L	0.05
CALCIUM	5/10/2017	29	29	MG/L	200
CHLORIDE	5/10/2017	70	70	MG/L	250
CONDUCTIVITY @ 25 C UMHOS/CM	5/10/2017	560	560	UMHO/CM	1500
CORROSIVITY	5/10/2017	-0.19	-0.19	LANG	0
HARDNESS, TOTAL (AS CAC03)	5/10/2017	150	150	MG/L	400
MAGNESIUM	5/10/2017	18	18	MG/L	150
MANGANESE	5/10/2017	0.0011	0.0011	MG/L	0.05
METOLACHLOR	6/18/2017	10.73	.73	ppb	
PH	5/10/2017	8.3	8.3	PH	8.5
PHOSPHORUS, TOTAL	5/10/2017	0.64	0.64	MG/L	5
POTASSIUM	5/10/2017	7	7	MG/L	100
SILICA	5/10/2017	4.2	4.2	MG/L	50
SODIUM	5/10/2017	43	43	MG/L	100
SULFATE	5/10/2017	85	85	MG/L	250
TDS	5/10/2017	300	300	MG/L	500
ZINC	5/10/2017	0.019	0.019	MG/L	5

During the 2017 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyze	Type
3/9/2016 – 11/1/2017	IESWTR	FAILURE ADDRESS DEFICIENCY (IESWTR)
3/9/2016 – 11/1/2017	IESWTR	FAILURE ADDRESS DEFICIENCY (IESWTR)
4/1/2017 – 6/30/2017	PUBLIC NOTICE	PUBLIC NOTICE RULE LINK TO VIOLATION
4/1/2017 – 6/30/2017	TTHM	MCL, LRAA

All noted violations shown above have been resolved.

Additional Required Health Effects Language:

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.

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.

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We found E. coli bacteria, indicating the need 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(s) was completed, and any sanitary defects were corrected.

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

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.

For additional information, please contact Mike Clift, at 620- 434- 5353.

Notice is being sent to you by City of Wellington, State Water System ID# Y0500, July 1, 2018

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