# Georgetown Municipal Water and Sewer Water Quality Report 2019

Water System ID: KY1050157 Manager: Chase Azevedo 502-863-7816 CCR Contact: James Long 502-863-7816 jlong@gmwss.com

Mailing Address: P.O. Box 640 Georgetown, KY 40324 Meeting location and time: 1000 W Main St, Georgetown 3<sup>rd</sup> Tuesday, monthly at 4 PM

The source of your drinking water is the Royal Spring, which is classified as Groundwater Under the Direct Influence of Surface Water. GMWSS customer demand is supplemented by treated surface water purchased from Frankfort Plant Board on a daily basis and Kentucky-American Water Company on an as-needed basis. GMWSS has completed a source water assessment plan and it may be viewed at the GMWSS Administration building during regular business hours. It has been determined that the Royal Spring has a moderate susceptibility to potential contamination due to runoff from various sources in an urban environment. Frankfort has determined that the intake at Pool #4, on the Kentucky River, generally has a moderate susceptibility to contamination due to activities in the watershed. Kentucky-American has determined that the Kentucky River intake at Jacobson Park is vulnerable to contamination from agriculture and urban storm water runoff. The complete Source Water Assessment Plan for Frankfort can be obtained by contacting their office at 502-352-4372. The complete Source Water Assessment Plan for Kentucky American can be obtained by contacting their office at 800-300-6202.

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 may be obtained by calling the Environmental Protection Agency'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 may pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include: Microbial contaminants, such as viruses and bacteria, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater runoff, agriculture or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, stormwater runoff, or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas production or mining activities). 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. FDA regulations establish limits for contaminants in bottled water to 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).

#### **Information About 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 local public 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.

## Some or all of these definitions may be found in this report:

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 (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.

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.

Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present.

Not Applicable (N/A) - does not apply.

Parts per million (ppm) - or milligrams per liter, (mg/l). One part per million corresponds to one minute in two years or a single penny in \$10,000.

 $\textbf{Parts per billion (ppb)} \text{ - or micrograms per liter, } (\mu\text{g/L}). \text{ One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.}$ 

Parts per trillion (ppt) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.

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

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. Copies of this report are available upon request by contacting our office during business hours.

To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Regulated Contaminant Monitoring Results from Georgetown Municipal Water and Sewer

Regulated Contaminal Regulated Contaminant										•	<u> </u>	
Contaminant		ints	Georgetown Municipal Water and Sewer Service Report Range Date of							Likely Source of		
[code] (units)	MCL	MCLG		evel	of Detecti		_		Sample	Violation	Contamination	
Barium	MCL	MCLG				1 Det	cction		Sample		Drilling wastes; metal	
[1010] (ppm)	2	2	0	0.025 to		i to	to 0.025		Feb-19	No	refineries; erosion of natural deposits	
Fluoride [1025] (ppm)	4	4	1.20		1.2	1.2 to		1.2 Feb-1		No	Water additive which promotes strong teeth	
Nitrate [1040] (ppm)	10	10	3	3.76 3.76		to 3.76		5	Jan-19	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits	
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	(10			to 1.67		2019	No	Naturally present in environment.		
*Monthly ratio is the % TO	C removal	achieved to the	% TO	C remov					must be 1.0	00 or greater	for compliance.	
Chloramines	MRDL	MRDLG		2.55								
(ppm)	= 4	= 4	`	ighest erage)	0.6 to		3.8		2019	No	Water additive used to control microbes.	
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	,	37 (high site 8		to 56		ites)	2019	No	Byproduct of drinking water disinfection	
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	35 (high site 10 average) (range o		to 53 of individual sites)		2019	No	Byproduct of drinking water disinfection.			
Household Plumbing Con	ntaminan	ts										
Copper [1022] (ppm) sites exceeding action level	AL = 1.3	1.3	0.225 (90 <sup>th</sup> 0.009 percentile)		0.009	0093 to 1.03		3	Jul-18	No	No Corrosion of household plumbing systems	
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	(	2		to 10			Jul-18	No Corrosion of household plumbing systems		
Other Constituents	•				•			•		•	•	
Turbidity (NTU) TT  * Representative samples		lowable Levels	Highest Sin Measureme		-		Lowes Monthl		Violation	Likely Source of Turbidity		
Turbidity is a measure of the clarity of the water and not a contaminant.	Less than	than 1 NTU* 0.3 NTU in nonthly samples		0.108			100	100 No		Soil runoff		
				Averag	ge	Ra	Range of Detection					
Fluoride (added for der	ntal heal	th)		0.		0.57 to			1.05			
Sodium (EPA guidance	level =	20 mg/L)		22	.8	22			22.8			
Secondary Contaminant Maximum Allowab		Repo		ort				Date of				
		ble	e Level		of Detectio			n	Sample			
		.05 to 0.2 mg/s	1	0.05				0.05	Feb-19			
Aluminum 0.05 to 0.2 mg/l Chloride 250 mg/l					45 to		45	Feb-19				
Corrosivity		Noncorrosive		0.001				0.001	Feb-19			
Fluoride		2.0 mg/l				1.1 to		(	1.1	Feb-19		
рН		6.5 to 8.5	7.63			7.63 to		7.63	Feb-19			
Sulfate		250 mg/l		43.1		43			43.1	Feb-19		
Total Dissolved Solids										Feb-19		
1 otal Dissolved Solids	500 mg/l			367		36	7 to		367	reb-19		

Secondary contaminants do not have a direct impact on the health of consumers and are not required in the Consumer Confidence Report. They are being included to provide additional information about the quality of the water.

Regulated Contaminant Monitoring Results for Frankfort Plant Board

Regulated Contaminant Test Results Frankfort Plant Board											
Contaminant			Report Range		ange Date		Violation	Likely Source of			
[code] (units)	MCL	MCLG	Level	of Detection		Sample		Contamination			
Combined radium	5	0	2.66	2.66 1	to	2.66	Oct-17	No	Erosion of natural deposits		
(pCi/L)									Erosion of natural deposits		
Barium									Drilling wastes; metal		
[1010] (ppm)	2	2	0.018	0.018 1	to	0.018	Feb-19	No	refineries; erosion of natural deposits		
Fluoride									XX . 10.1 1.1		
[1025] (ppm)	4	4	0.3	0.3 t	to	0.3	Feb-19	No	Water additive which promotes strong teeth		
Nitrate									Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits		
[1040] (ppm)	10	10	1	0.22 t	to	1	Nov-19	No			
Total Organic Carbon (ppm)			1.71						Naturally present in environment.		
(measured as ppm, but	TT*	N/A	(lowest	1.24 1	to	3.56	2019	No			
reported as a ratio)			average)	(mont	thly 1	ratios)			environment.		
*Monthly ratio is the % TO	C removal	achieved to the	% TOC rer	noval requi	ired. 1	Annual ave	rage must be	1.00 or grea	ater for compliance.		
Other Constituents							_				
Turbidity (NTU) TT	Al	lowable	Highest Single		I	Lowest	Violation				
* Representative samples	]	Levels	Measurement		М	onthly %		Likely Source of Turbidity			
Turbidity is a measure of the	No more	than 1 NTU*							•		
clarity of the water and not		0.3 NTU in	0.26			100	No	Soil runoff			
a contaminant.	95% of m	onthly samples									

## Unregulated Contaminant Monitoring Results from Georgetown Municipal Water and Sewer

Unregulated Contaminants (UCMR 4)	average	range (	(ppb)	date
anatoxin-a	0.004	0 to	0.0325	Sep-19

### **Unregulated Contaminant Monitoring Results from Frankfort Plant Board**

Unregulated Contaminants (UCMR 4)	average	range (ppb)	date
Manganese	0.766	0.766 to 0.766	2019
HAA5	32.1	26.09 to 40.87	2019
HAA6Br	8.06	6.26 to 11.9	2019
HAA9	39.6	32.9 to 51.9	2019

Your drinking water has been sampled for a series of unregulated contaminants. Unregulated contaminants are those for which EPA has not established drinking water standards. There are no MCLs and therefore no violations if found. The purpose of monitoring for these contaminants is to help EPA determine where the contaminants occur and whether they should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact our office during normal business hours.