## 2019 Water Quality Report

Manager: Jacob Crume

## Caneyville Municipal Water Works

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Meetings: City Hall, 304 E. Maple Street 2nd Monday, Each Month at 6:00 PM

We purchase our water from Grayson County Water District. The Grayson County Water District treats water from Rough River Lake, which is a surface water source. Areas of high concern consist of Row Crops. These high areas of concern themselves do not represent a danger to the environment. It is the potential for run-off of herbicides, pesticides, and other chemicals accidentally spilling into the water source from these sites that gives them the Susceptibility Ranking of High. The overall Susceptibility Ranking for this water source is Moderate. This complete report is available at the Grayson County Water Treatment Plant, 517 Waterside Dr, Falls of Rough, KY 40119. Results of a Source Water Assessment show that activities and land uses upstream of the Grayson County Water District's water source can pose potential risks to your drinking water. Contaminants could be released that could potentially get into your drinking water.

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).

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.

Parts per billion (ppb) - or micrograms per liter, (µg/L). 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.

KY0430063

## 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.

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.

Regulated Contaminant Test Results GRAYSON COUNTY WATER DISTRICT								ISTRICT		
Contaminant [code] (units)	MCL	MCLG	Report Level	•		Date of Sample	Violation	Likely Source of Contamination		
Radioactive Contamina	ants					J	•		I	
Alpha emitters [4000] (pCi/L)	15	0	1.3	1.3	to	1.3	Jul-17	No	Erosion of natural deposits	
Combined radium (pCi/L)	5	0	1.011	1.011	to	1.011	Jul-17	No	Erosion of natural deposits	
Inorganic Contaminants	4								!	
Fluoride [1025] (ppm)	4	4	0.70	0.7	to	0.7	Jun-19	No	Water additive which promotes strong teeth	
Synthetic Organic Con	taminants	including P	esticides a	nd Her	bicid	es			!	
Atrazine [2050] (ppb)	3	3	0.26	0.26	to	0.26	Nov-19	No	Runoff from herbicide used on row crops	
Disinfection Byproduct Pr	recursor									
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	2.04 (lowest average)	1.36 (me	to onthly	2.51 ratios)	2019	No	No Naturally present in environmen	
*Monthly ratio is the % TOC r	emoval achie	ved to the % TO	C removal re	quired. Ar	nual a	verage must	be 1.00 or grea	iter for comp	liance.	
Other Constituents										
Turbidity (NTU) TT * Representative samples		lowable Levels		est Single surement		Lowest Monthly %	Violation	1	Likely Source of Turbidity	
Turbidity is a measure of the clarity of the water and not a contaminant.	No more the Less than 0 95% of more		C	).29		100	No	Soil runoff		

Regulated Contaminant T	est Results				CANE	YVILLE	MUNICIPA	AL WATI	ER WORKS	
Contaminant	MCL	MCLG	Report	Range			Date of	Violation	Likely Source of	
[code] (units)			Level	of Detection		Sample	Violation	Contamination		
Disinfectants/Disinfection	Byproduct	ts and Precurs	ors							
Chlorine	MRDL	MRDLG	0.99						Water additive used to control	
(ppm)	= 4	= 4	(highest	0.34	to	1.78	2019	No	microbes.	
			average)							
HAA (ppb) (Stage 2)			41						Byproduct of drinking water disinfection	
[Haloacetic acids]	60	N/A	(high site	25	to	55	2019	No		
			average)	(range	of indiv	idual sites)				
TTHM (ppb) (Stage 2)			45							
[total trihalomethanes]	80	N/A	(high site	27.1	to	56.8	2019	No	Byproduct of drinking water disinfection.	
			average)	(range of individual sites)				disinicction.		
Household Plumbing Cont	taminants						•			
Copper [1022] (ppm)	AL =		0.122						G : 61 1.11.1.1:	
sites exceeding action level	1.3	1.3	(90 <sup>th</sup>	0	to	0.143	Jun-18	No	Corrosion of household plumbing systems	
0			percentile)							

Your drinking water has been sampled for a series of unregulated contaminants. Unregulated contaminants are those that 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.

Unregulated Contaminants (UCMR 4)	average	r	ange (	ppb)	date
Manganese	0.778	0.778	to	0.778	Feb-19
HAA5	14.895	6.256	to	26.6	Feb-19
HAA6Br	3.068	2.76	to	3.619	Feb-19
HAA9	17.77	8.62	to	29.69	Feb-19

Grayson County Water District
Violations
Violation #: 2019-9950954; GCWD failed to submit Total Organic Carbon results by the deadline of 07/10/2019 for compliance period 06/01/2019 - 06/30/2019. The samples were collected but not submitted until Aug., 2019.
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Copies of this report are available upon request at City Hall, located at City Hall, 304 E. Maple Street, in Caneyville, Ky. For any questions concerning the 2019 CCR, please contact Mr. Jacob Crume at (270) 879-9701.