## 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, ( $\mu$ g/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.

To request a paper copy call (270) 384-2181.



## 2021 Water Quality Report



Water System ID: KY0011016 Manager: Lennon Stone 270-384-2181 CCR Contact: Bradley Miller 270-465-2200

Mailing address: P.O. Box 567, 109 Grant Lane Columbia, KY 42728

Meeting location and time: Utilities Office – 109 Grant Lane Columbia, KY Second Thursday each month at 4:30 PM This report is designed to inform the public about the quality of water and services provided on a daily basis. Our commitment is to provide a safe, clean, and reliable supply of drinking water. We want to assure that we will continue to monitor, improve, and protect the water system and deliver a high quality product.

Most of the water for our system is treated by Columbia/Adair Utilities which has a source of Green River Reservoir. Some water is purchased from Campbellsville to serve the Eastridge Cemetery Road. Campbellsville treats water from Green River Reservoir and City Lake in Taylor County. Water purchased from Jamestown serves the Glensfork area and that water comes from Lake Cumberland. All of these water sources come from surface water. Each water system has completed a Source Water Assessment Plan (SWAP) to determine the susceptibility to contamination. The analysis of the susceptibility for all sources indicates that the potential for contamination is generally low. However, each assessment had areas of high concern including row crops, roads, bridges and culverts, forestland, pastureland, and KPDES permitted discharges. The release of contaminants through accidental spills could have an immediate impact on source water quality. The complete Source Water Assessment Plans are available for review at the respective water systems during normal business hours and are also available at the Area Development District offices.

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. Immunocompromised 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.



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 Columbia/Adair Utilities								
Contaminant			Report	Range		Date of		Likely Source of
[code] (units)	MCL	MCLG	Level	of Detection		Sample	Violation	Contamination
Barium [1010] (ppm)	2	2	0.02	0.02	to 0.02	Mar-21	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride								Water additive which promotes
[1025] (ppm)	4	4	0.76	0.76	to 0.76	Mar-21	No	strong teeth
Nitrate								Fertilizer runoff; leaching from
[1040] (ppm)	10	10	0.68	0.68	to 0.68	Mar-21	No	septic tanks, sewage; erosion of natural deposits
Atrazine								Runoff from herbicide used on
[2050] (ppb)	3	3	1	BDL	to 2	Sep-20	No	row crops
Total Organic Carbon (ppm)			1.29					
(measured as ppm, but	TT*	N/A	(lowest	1.00	to 1.87	2021	No	Naturally present in environment.
reported as a ratio)			average)	(mont	hly ratios)			
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.								
Chlorine	MRDL	MRDLG	1.94					W. 102 1 1
(ppm)	= 4	=4	(highest	0.42	to 2.68	2021	No	Water additive used to control microbes.
			average)					meroues.
HAA (ppb) (Stage 2)			45					
[Haloacetic acids]	60	N/A	(high site	15	to 69.8	2021	No	Byproduct of drinking water disinfection
			average)	(range of i	ndividual sites)			distinection
TTHM (ppb) (Stage 2)			39		· ·			
[total trihalomethanes]	80	N/A	(high site	11	to 52	2021	No	Byproduct of drinking water disinfection.
			average)	(range of i	ndividual sites)			uis infection.
Household Plumbing	Contami	nants	8 7					
Copper [1022] (ppm) Round 1	AL=		0.11					
sites exceeding action level	1.3	1.3	(90 <sup>th</sup>	0	to 0.16	Jul-20	No	Corrosion of household plumbing
0			percentile)					systems
Lead [1030] (ppb) Round 1	AL=		6					
sites exceeding action level	15	0	(90 <sup>th</sup>	0	to 12	Jul-20	No	Corrosion of household plumbing
0		-	percentile)					systems
Other Constituents			1 /	ı		1		
Turbidity (NTU) TT	Allowable		Highest Single		Lowest	Violation		
* Representative samples	Levels		Measurement		Monthly %		Likely Source of Turbidity	
Turbidity is a measure of the	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples		0.06			1	Soil runoff	
clarity of the water and not a					100	No		
contaminant.								
7570 от пълиту запръсз								

Regulated Contamina	nt Test R	esults	Campbells	ville W	ater	and Sewe	r System		
Contaminant			Report	Range			Date of	Violation	Likely Source of Contamination
[code] (units)	MCL	MCLG	Level	of Detection		Sample			
Barium									D.:#:
[1010] (ppm)	2	2	0.02	0.02	to	0.02	Mar-21	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride									
[1025] (ppm)	4	4	0.71	0.71	to	0.71	Mar-21	No	Water additive which promotes strong teeth
Nitrate									Fertilizer run off; leaching from
[1040] (ppm)	10	10	0.66	0.66	to	0.66	Mar-21	No	septic tanks, sewage; erosion of natural deposits
Atrazine									Run off from herbicide used on
[2050] (ppb)	3	3	0.22	0.22	to	0.22	Ju1-21	No	row crops
Total Organic Carbon (ppm)			1.27						
(measured as ppm, but	TT*	N/A	(lowest	1.00	to	1.74	2021	No	Naturally present in environment
reported as a ratio)			average)	(monthly ratios)					
*Monthly ratio is the % TOC:	removal achi	eved to the % TO	OC removal requi	red. Annı	ıal ave	rage must be	1.00 or greate	rfor complia	nce.
Other Constituents									
Turbidity (NTU) TT	Allowable		Highest Single			Lowest	Violation		
* Representative samples	Levels		Measurement		1	Monthly %		Likely Source of Turbidity	
Turbidity is a measure of the	No more th	an 1 NTU*							_
clarity of the water and not a contaminant.	Less than 0.3 NTU in		0.24			100	No		Soil run off

95% of monthly samples

Regulated Contaminant Test Results Jamestown Municipal Water Works									
Contaminant			Report	t Range		Date of	Violation	Likely Source of	
[code] (units)	MCL	MCLG	Level	of Detection		Sample		Contamination	
Fluoride [1025] (ppm)	4	4	0.60	0.6	to	0.6	Jan-21	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	0.26	0.26	to	0.26	Jan-21	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	2.2 (lowest average)	1.00 (mo	to onthly	4.17 ratios)	2021	No	Naturally present in environment.
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.									
Other Constituents									
Turbidity (NTU) TT	Allowable		Highest Single			Lowest	Violation		
* Representative samples	Levels		Measurement			Monthly %		Likely Source of Turbidity	
Turbidity is a measure of the clarity of the water and not a contaminant.	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples		0.06			100	No	Soil runoff	

Violation 2020-23 - We received a violation because our 2020 Consumer Confidence Report (CCR) did not report violations 2020-22 and 2020-21 which we received for not submitting public notices within one year of receiving violations 2018-16 and 2019-18. The original violations were for failing to include all of daily chlorine results in our monthly reports for February 2018 and February 2019.

The CCR for 2020 did not contain results for Atrazine that was detected below the MCL. Those results are included in this report.