2021 Water Quality Report

## **Breathitt County Water District**

KY0131012

Manager: Estill McIntosh Contact: Estill McIntosh Phone: (606) 666-3800

Address: 1137 Main Street, Suite 305, Old Court Hous Jackson, KY 41339

Meetings: 1137 Main Street, Suite 305 Jackson, Ky 3rd Wednesday, Monthly at 10:00 AM

We purchase water from Jackson Municipal Water Works and Campton Water System both of which treats surface water from the North Fork of the Kentucky River and Campton Lake. An analysis of the susceptibility to contamination of each source is rated as moderate. Potential sources and pathways of contamination come from transportation corridors, chemical & fuel storage, wastewater discharges mining and erosion. Under certain circumstances these activities could release contaminants and thereby pose potential risks to your drinking water. These activities, and how they are conducted, are of interest to the entire community because they potentially affect your health and the cost of treating your water. Activities immediately upstream of your water supply intake are of special concern because they provide little response time to the water system operators. The complete source water assessment is available for review at the KY River and Big Sandy Area Development District's located in Hazard and Prestonsburg, respectively.

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, ( $\mu g/L$ ). 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 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			A= Jackson Municipal						C= Campton		
Contaminant			rce	Report Range		ıge	Date of	Violation	Likely Source of		
[code] (units)	MCL	MCLG	Source	Level	of	of Detection		Sample		Contamination	
Inorganic Contaminant	ts							· · · ·	•		
Barium [1010] (ppm)	2	2	A=	0.04	0.04	to	0.04	Apr-21	No	Drilling wastes; metal refineries; erosion of natural deposits	
Fluoride [1025] (ppm)	4	4	A= C=	0.76	0.76	to	0.76	Apr-21 May-21	No No	Water additive which promotes strong teeth	
Nitrate [1040] (ppm)	10	10	A=	0.23	0.23	to	0.23	Apr-21	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits	
Disinfectants/Disinfection Byproducts and Precursors								B= Breathi	tt County	Water District	
Total Organic Carbon (ppm) (report level=lowest avg.	TT*	N/A	A= C=	1.18	1	to	1.97	2021	No No	Naturally present in environment.	
range of monthly ratios)  *Monthly ratio is the % TOC r	amazal achi	avad to the 0/			3.92 1.23 to 8.37 2021 No moval required. Annual average must be 1.00 or greater for compliance.						
Chlorine	MRDL	MRDLG	100	1.49	meu. Annt	uai aV	rerage must be	1.00 or greate	1 101 compile	ance.	
(ppm)	= 4	= 4	B=	(highest average)	0.75	to	2.04	2021	No	Water additive used to control microbes.	
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	B=	26 (average)	7.6 (range o	to f indi	48 vidual sites)	2021	No	Byproduct of drinking water disinfection	
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	B=	40 (average)	10 (range o	to f indi	86.4 vidual sites)	2021	No	Byproduct of drinking water disinfection.	
Household Plumbing C	1	nts			1			T			
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	B=	0.030 (90 <sup>th</sup> percentile)	0	to	0.055	Jul-20	No	Corrosion of household plumbing systems	
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	B=	0 (90 <sup>th</sup> percentile)	0	to	3.2	Jul-20	No	Corrosion of household plumbing systems	
Other Constituents	•			/					•	!	
Turbidity (NTU) TT	Allowable		rce	Highest Single Measurement			Lowest	Violation			
* Representative samples	Levels		Source				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		A=	0.06			100	No	Soil runoff		
	95% monthly samples		C=	0.12			100	No			

## CITY OF CAMPTON: Violation ID 2021-9953717

Our water system violated drinking water requirements over the past year by failing to timely report Combined Filter Effluent Turbidity on the July 2021 Monthly Operating Report to the Kentucky Division of Water (KDOW). Even though this is not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the July 1, 2021-July 31, 2021 compliance period, we did not complete all monitoring requirements by failing to correctly report our Turbidity on time. We are now reporting our Turbidity results on the proper page and submitting in the proper time frame. There is nothing you need to do at this time. There are no potential adverse health effects related to the reporting violation, no population is at risk, and there is no need to use alternative water supplies. After becoming aware of the omission, we completed the July Turbidity page and submitted the data. No further actions are required at this time. For more information, please contact Elizabeth Nickell at 606-668-7308 or PO Box 35, Campton, KY 41301.

If you have any questions regarding this report or would like to request a copy, please contact Estill McIntosh at (606) 666-3800 or 1137 Main Street, Suite 305, Jackson KY 41339.

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.

\*\*\* Please see next page for violation details \*\*\*