Beech Fork Water Commission Water Quality Report 2022

Water System ID: KY0990281 Supervisor: Kevin Pelfrey 606-663-4312 CCR Contact: Kevin Pelfrey 606-663-4312

Mailing Address: 1900 Pompeii Rd Clay City, KY 40312 Meeting location and time: Water Plant Second Monday, monthly at 6 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 our customers with 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. Water is the most indispensable product in every home and we ask everyone to be conservative and help us in our efforts to protect the water source and the water system.

Beech Fork Water Commission treats raw water from Red River and Beech Fork Reservoir and distributes it to three consecutive water systems. Red River and the reservoir are surface water sources. Source water assessments has been completed by the Commission and is available for review at the water treatment plant during normal business hours. An analysis of the susceptibility of the Beech Fork Water Commission's raw water supply to contamination indicates that the susceptibility potential is generally moderate. The City of Stanton has an airport that is located in close proximity to the intake site. This airport has a high susceptibility rating and is a potential contaminant source because of on-site chemical and fuel storage. Sixteen bridges or culverts with high susceptibility ratings are also located near the intake.

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.

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. Copies of this report are available at our office. If you would like a copy mailed to you please contact our office.

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 Contaminan	nt Test R	esults	Beech Forl	k Water	Co	mmission				
Contaminant			Report	Range of Detection		Date of		Likely Source of		
[code] (units)	MCL	MCLG	Level			Sample	Violation	Contamination		
Inorganic Contaminan	its		,	,				-		
Barium [1010] (ppm)	2	2	0.021	0.021	to	0.021	Apr-22	No	Drilling wastes; metal refineries; erosion of natural deposits	
Fluoride [1025] (ppm)	4	4	0.67	0.67	to	0.67	Apr-22	No	Water additive which promotes strong teeth	
Disinfectants/Disinfect	tion Byp	roducts and	Precursors							
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.52 (lowest average)	1.22 (mo	to nthly	2.13 y ratios)	2022	No	No Naturally present in environmen	
*Monthly ratio is the % TOC re	moval achie	eved to the % To	OC removal requi	ired. Annua	al av	erage must be	1.00 or greater	for complian	ice.	
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.79 (highest average)	1.4	to	2.2	2022	No	Water additive used to control microbes.	
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	28 (high site average)	28 (range o	to f indi	28 ividual sites)	2022	No	Byproduct of drinking water disinfection	
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	35 (high site average)	35	to	35 ividual sites)	2022	No	Byproduct of drinking water disinfection.	
Other Constituents				•						
Turbidity (NTU) TT	Allowable		Highest Single		Lowest	Violation				
* Representative samples	Levels		Measurement		Monthly %		Likely Source of Turbidity			
clarity of the water and not a contaminant.	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples		0.25		100	No	Soil runoff			
			Average	Rang	e of l	Detection		•		
Fluoride (added for dental health)			0.8	0.69	to	0.9				
Sodium (EPA guidance level = 20 mg/L)			4.4	4.38	to	4.38				

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

Secondary Contaminant		Report		Date of		
Secondary Contaminant	Maximum Allowable Level	Level	0	Sample		
Aluminum	0.05 to 0.2 mg/l	0.05	0.05	to	0.05	Mar-22
Chloride	250 mg/l	11.6	11.6	to	11.6	Mar-22
Copper	1.0 mg/l	0.004	0.004	to	0.004	Mar-22
Corrosivity	Noncorrosive	-1.74	-1.74	to	-1.74	Mar-22
Fluoride	2.0 mg/l	0.69	0.69	to	0.69	Mar-22
Iron	0.3 mg/l	0.082	0.082	to	0.082	Mar-22
Manganese	0.05 mg/l	0.006	0.006	to	0.006	Mar-22
pН	6.5 to 8.5	7.2	7.2	to	7.2	Mar-22
Sulfate	250 mg/l	11.9	11.9	to	11.9	Mar-22
Total Dissolved Solids	500 mg/l	88	88	to	88	Mar-22