2021 Water Quality Report Manager: Vernon Anderton Address: P.O. Box 249 Meetings: Perry County Fiscal Court 46

Perry County Water and Sewer Contact: Vernon Anderton Vicco, KY 41773

Meetings: Perry County Fiscal Court 461 Main St Hazard, KY 3rd Tuesday of Month 10:00 AM

We purchase surface water treated by Knott County Water and Sewer District. The raw water source for the District is Carr Fork Lake. A source water assessment of the lake and watershed has been performed which includes a susceptibility analysis. Carr Fork's susceptibility to contamination is rated as moderate. However, there are a few areas of concern such as roads & bridges, logging and underground storage tanks and other activities that have the potential for the release of hazardous chemicals. Although mining is limited near the intake there are a substantial number of oil and gas wells in the protection area. Under certain circumstances contaminants could be released that would pose challenges to water treatment, or even get into 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. The complete source water assessment is available for review at the Kentucky River Area Development District office in Hazard KY.

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.

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.

approved by EPA, the State ha contaminants are not expected										the concentrations of these nore than one year old. Copies of
this report are available upo		•	•	•				8		, , • • F • •
Regulated Contaminant Test Results				A = Knott County Water &				Sewer B = Perry County Water & Sewe		
Contaminant			rce	Report	rt Range		Date of	Violation	Likely Source of	
[code] (units)	MCL	MCLG	Source	Level			ection	Sample		Contamination
Microbiological Contai	minants									•
Inorganic Contaminan										
Fluoride										
[1025] (ppm)	4	4	A=	0.67	0.67	to	0.67	44317	No	Water additive which promotes strong teeth
Nitrate										Fertilizer runoff; leaching from
[1040] (ppm)	10	10	A=	0.18	0.18	to	0.18	44317	No	septic tanks, sewage; erosion of natural deposits
Disinfectants/Disinfecti	on Bypro	ducts and	Prec	ursors						
Total Organic Carbon (ppm)										
(report level=lowest avg.	TT*	N/A	A=	1.8	1.25	to	3.16	2021	No	Naturally present in environment
range of monthly ratios)			C=			to				
*Monthly ratio is the % TOC 1	emoval achi	eved to the %	TOC	removal requ	ired. Ann	ual av	erage must be	1.00 or greate	er for complia	ance.
Chlorine	MRDL	MRDLG		1.29						Weden addition and data and ad
(ppm)	= 4	= 4	B=	(highest average)	1.1	to	1.4	2021	No	Water additive used to control microbes.
HAA (ppb) (Stage 2)										
[Haloacetic acids]	60	N/A	B=	41	24	to	53	2021	No	Byproduct of drinking water
-				(average)	(range of individual		vidual sites)			disinfection
TTHM (ppb) (Stage 2)							, , , , , , , , , , , , , , , , , , ,			
[total trihalomethanes]	80	N/A	B=	55	35	to	75	2021	No	Byproduct of drinking water disinfection.
				(average)	(range o	of indi	vidual sites)			
		•							•	
Household Plumbing C	ontamina	ints								
Copper [1022] (ppm)	AL =		1	0.006						
sites exceeding action level	1.3	1.3	B=	(90 th	0.001	to	0.077	Jun-20	No	Corrosion of household plumbing systems
0				percentile)						systems
Other Constituents	•								•	-
Turbidity (NTU) TT	Allowable		rce	Highest Single			Lowest	Violation		
* Representative samples	Levels		Source	Measure	nent		Monthly %		Likely Source of Turbidity	
Turbidity is a measure of the	No more than 1 NTU*						v · ·			
clarity of the water and not a	Less than 0.3 NTU in		A=	(0.08		100	No	Soil runoff	
contaminant.		nly samples	¹	Ì						
	1 month	,p	1	Average	Rang	ge of I	Detection		1	
Sodium (EPA guidance level = 20 mg/L)				19.48	19.48	to	19.48			

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

Violation #: 20229613623 Consumer Confidence Rule

The Perry County Water & Sewer System recently received a violation. The link provided to customers on the water bill as primary distribution of the 2020 Consumer Confidence Reort (CCR) was inaccurate and therefore considered to be not delivered. This was an oversight on our behalf. We apologize for any inconvenience. The 2020 CCR can be found at www.krwa.org/ccr/PerryCountyWaterAndSewer.pdf.

If you have any questions regarding this report, please call Vernon Anderton at the Perry County Water and Sewer office at (606) 476-2414.