## 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 (MRNL) - the highest level of the 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.



## Lebanon Water Works Co. Water Quality Report 2018



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.

Water System ID: KY0780241 Manager: Daren Thompson

270-692-2491

CCR Contact: Daren Thompson

Mailing address: 120 S. Proctor Knott Avenue Lebanon, KY 40033

Meeting location and time: 120 S. Proctor Knott Avenue 1st Monday after the 10th each month at 7:00 PM Lebanon Water Company treats water and also purchases some water from Campbellsville. The water is blended within the distribution system.

Lebanon Water Works treats surface water from the Rolling Fork River and Fagan Branch Reservoir. An analysis of the overall susceptibility to contamination for these sources indicates that this susceptibility is generally moderate. Areas of high concern for the Rolling Fork River consist of underground storage tanks, an active landfill, row crops, and bridges and culverts. The areas of high concern at Fagan Branch Reservoir consist of row crops and the possibility for a potential chemical spill, underground storage tanks, and vehicle accidents causing the spilling of hazardous materials. The complete Source Water Assessment Plan is available for review at the Lebanon Water Works office.

## Water Purchased From Campbellsville

Campbellsville Municipal Water System treats surface water from Green River reservoir and City Reservoir in Taylor County. An analysis of the overall susceptibility to contamination indicates that this susceptibility is generally low. The concern for the Green River Reservoir is pollution from row crops, roads, forestland, hay fields, and pastureland presenting a long-term threat to pollution. The City Reservoir is more susceptible to contamination from within its protection zone due to the lower water flow in the stream, larger number of contamination sources, and location within the city of Campbellsville. The complete Source Water Assessment Plan is available for review at the Campbellsville Municipal Water System.

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.

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.

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.

lifetime to have a one-in-a-mill	on chance o	i naving the c							1			
	Allowable		5 5	Highest Single			Lowest	Violation				
	Le	evels	Source	Measurement		]	Monthly %		Likely Source of Turbidity			
Turbidity (NTU) TT	No more th	an 1 NTU*	L=		1		98					
* Representative samples	Less than 0.3 NTU in		C=	0.28			100	No	Soil runoff			
of filtered water	95% month	ly samples										
Regulated Contaminant Test Results Lebanon (L) Campbellsville (C)												
Contaminant			rce	Report	Range of Detection		Date of	Violation	Likely Source of			
[code] (units)	MCL	MCLG	Source	Level			ction	Sample		Contamination		
Barium			L=	0.026	0.026	to	0.026					
[1010] (ppm)	2	2	C=	0.02	0.02	to	0.02	2018	No	Drilling wastes; metal refineries; erosion of natural deposits		
Copper [1022] (ppm)	AL=			0.0447						Commission of household when him		
sites exceeding action level	1.3	1.3	L=	(90 <sup>th</sup>	0.0016	to	0.0846	2016	No	Corrosion of household plumbing systems		
0				percentile)								
Fluoride			L=	0.6	0.6	to	0.6			W-4		
[1025] (ppm)	4	4	C=	0.8	0.8	to	0.8	2018	No	Water additive which promotes strong teeth		
Lead [1030] (ppb)	AL=			3						Corrosion of household plumbing		
sites exceeding action level	15	0	L=	(90 <sup>th</sup>	0	to	4	2016	No	systems		
0				percentile)								
Nitrate			L≔	0.502	0.502	to	0.502			Fertilizer runoff; leaching from		
[1040] (ppm)	10	10	C=	0.6	0.6	to	0.6	2018	No	septic tanks, sewage; erosion of natural deposits		
Total Organic Carbon (ppm)			L=	3.08	1.34	to	4.32					
(report level=lowest avg.	TT*	N/A	C=	1.2	1.07	to	1.69	2018	No	Naturally present in environment.		
range of monthly ratios)												
*Monthly ratio is the % TOC 1	emoval achi	eved to the %	TOC	removal requ	ired. Ann	ual av	erage must be	e 1.00 or greate	er for complia	ance.		
Chlorine	MRDL	MRDLG		1.27								
(ppm)	= 4	= 4	L=	(highest	0.39	to	2.01	2018	No	Water additive used to control microbes.		
				average)						microbes.		
HAA (ppb) (Stage 2)												
[Haloacetic acids]	60	N/A	L=	47	28	to	47	2018	No	Byproduct of drinking water disinfection		
_				(average)	average) (range of ind		ividual sites)			uis in rection		
TTHM (ppb) (Stage 2)												
[total trihalomethanes]	80	N/A	L=	49	21	to	67	2018	No	Byproduct of drinking water disinfection.		
[				(average)	(range of individ		vidual sites)			disinfection.		

	Average	Range of Detection			
Fluoride (added for dental health)	1.0	0.58 to 1.18			
Sodium (EPA guidance level = 20 mg/L)	3.6	3.64 to 3.64			

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	of Detection		Sample	
Aluminum	0.05 to 0.2 mg/l	0.02	0.02	to	0.02	Feb-18
Chloride	250 mg/l	13.5	13.5	to	13.5	Feb-18
Color	15 color units	1	1	to	1	Feb-18
Corrosivity	Noncorrosive	-1.43	-1.43	to	-1.43	Feb-18
Fluoride	2.0 mg/l	0.8	0.8	to	0.8	Feb-18
Manganese	0.05 mg/l	0.01	0.01	to	0.01	Feb-18
Odor	3 threshold odor number	1	1	to	1	Feb-18
рН	6.5 to 8.5	7.01	7.01	to	7.01	Feb-18
Sulfate	250 mg/l	17.7	17.7	to	17.7	Feb-18
Total Dissolved Solids	500 mg/l	106	106	to	106	Feb-18

