2021 Water Quality Report

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Ledbetter Water District

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Third Tuesday / 5:30 pm

Ledbetter, Kentucky 42058

Ledbetter Water District's water sources are A) groundwater that we treat, from wells near the treatment plant at 1483 US 60 West, Ledbetter; and B) surface water from the Cumberland River at Pickneyville, Ky., purchased from Crittenden-Livingston Water District. Source (A) supplies Ledbetter, from Ferren Road to the Tennessee River bridge. Source (B) helps supply all of the water district. An analysis of our water supplies indicates that their susceptibility to contamination is high. Source (A), Ledbetter's wells, is susceptible to contamination from agricultural land use, underground storage tanks, agribusiness, and highway 60. Source (B), the Cumberland River, is susceptible to contamination from bridges, large capacity septic tanks, underground storage tanks, coast guard stations, landfills, chemical storage facilities, rock quarries and mines, auto repair facilities, wastewater treatment plants, barge traffic, asphalt plants, and highways. This is a summary. The complete water source assessment reports are available for review at the Ledbetter Water District Office.

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, (μ 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 \$ 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 even								
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.

Ledbetter Water District

				Leaber	tter wa	ate	r District			
A= Ledbetter Water District,	B= Crittende	en - Livingston	n Wat	er District						
Regulated Contaminan		0								
Contaminant			ce	Report		Ra	nge	Date of	Violation	Likely Source of
		Source	-	_		0		violation		
[code] (units)	MCL	MCLG	S	Level	0	i Dei	tection	Sample		Contamination
Radioactive Contamina			<u> </u>						N	
Beta photon emitters	50	0	A=	9.4	9.4	to	9.4	Feb-17	No	Decay of natural and man-made deposits
(pCi/L)									N	deposits
Alpha emitters	15	0	A=	10.7	10.7	to	10.7	Feb-17	No	Erosion of natural deposits
[4000] (pCi/L)									N.	
Combined radium	5	0	A=	1.6	1.6	to	1.6	Feb-17	No	Erosion of natural deposits
(pCi/L)			B=	0.42	0.42		0.42	July-17	No	
Inorganic Contaminan	ts	1	<u> </u>	1				1		
Arsenic			A=	1.2	1.2	to	1.2	Dec-20	No	Natural erosion; runoff from
[1005] (ppb)	10	N/A								orchards or glass and electronics production wastes
Barium			A=	0.038	0.038	to	0.038	Dec-20	No	
[1010] (ppm)	2	2								Drilling wastes; metal refineries; erosion of natural deposits
Fluoride			A=	0.54	0.54	to	0.54	Dec-20	No	Water additive which promotes
[1025] (ppm)	4	4	B=	0.79	0.79	to	0.79	Nov-21	No	strong teeth
Nitrate	4		B=	0.26	0.26	to	0.26	Sept-21	No	Fertilizer runoff; leaching from
[1040] (ppm)	10	10	D-	0.20	0.20	10	0.20	Sept 21	110	septic tanks, sewage; erosion of natural deposits
Selenium			A=	1.2	1.2	to	1.2	Dec-20	No	Discharge from petroleum and
[1045] (ppb)	50	50								metal refineries or mines; erosion of natural deposits
Disinfectants/Disinfect	ion Bypro	ducts and	Prec	cursors						
Total Organic Carbon (ppm)			B=	0.81	-6.22	to	2.12	2021	YES	
(report level=lowest avg.	TT*	N/A								Naturally present in environment.
range of monthly ratios)										
*Monthly ratio is the % TOC r	emoval achie	eved to the %	TOC	removal requ	ired. Annu	ual av	verage must be	1.00 or greater	r for complia	ince.
Chlorine	MRDL	MRDLG		1.36				, in the second se		
(ppm)	= 4	= 4	A=	(highest average)	0.77	to	2.20	2021	No	Water additive used to control microbes.
HAA (ppb) (Stage 2)				Ç,						
[Haloacetic acids]	60	N/A	A=	45	21	to	54.6	2021	No	Byproduct of drinking water disinfection
				(average)	(range o	of ind	lividual sites)			
TTHM (ppb) (Stage 2)										Demonderet of deinhing conten
[total trihalomethanes]	80	N/A	A=	63	26	to	89	2021	No	Byproduct of drinking water disinfection.
				(average)	(range o	of ind	lividual sites)			unsimeetion.
Household Plumbing C	Contamina	ants								
Copper [1022] (ppm)	AL =			0.210						Compaign of household structure
sites exceeding action level	1.3	1.3	A=	(90 th	0	to	0.42	July-19	No	Corrosion of household plumbing systems
0				percentile)						
Lead [1030] (ppb)	AL =			8.3						Comparing of here 1, 11, 1, 11
sites exceeding action level	15	0	A=	(90 th	0	to	500	July-19	No	Corrosion of household plumbing systems
2				percentile)						5,500115
Other Constituents										
Furbidity (NTU) TT Allowable		owable	Source	Highest Single Measurement		Lowest	Violation			
* Representative samples			Sot			Monthly %	1	Likely Source of Turbidity		
Turbidity is a measure of the			A=		0.17		100	No	1	
larity of the water and not a			1							

Notice of Violation 2022-9266053 PUBLIC NOTICE CONSUMER CONFIDENCE RULE / CCR

B=

Less than 0.3 NTU in

95% monthly samples

We received a Notice of Violation from our primacy agency, Kentucky Division of Water. *Description of Non Compliance*: Our system failed to send a copy of a customer bill with the URL to Kentucky Division of Water by July 1, 2021. This bill, with the URL (WEB ADDRESS) used for primary distribution of our CCR. *Remedial Measures*: Detail this Notice of Violation in the 2021 Consumer Confidence Report.

100

No

Soil runoff

0.13

Notice by Crittenden - Livingston Water District

clarity of the water and not a

contaminant.

Crittenden - Livingston Water District violated one or more drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

Crittenden - Livingston Water District recieved a Notice of Violation from our primacy agency Kentucky Division of Water. They failed to meet DBP procursor removal ratio 1.0 (TOC). The system's 4th QTR 2021 ratio is 0.81. The system has been sending the TOC samples to two independent certified labs. System Operators beliveve Raw and Finished samples were switched by the lab and that is the compliance issue. It is probable that the district will change labs to insure compliance. They anticipate resolving the problem within 18 Months. Total Organic Carbon (TOC) has no health effects. However, total organic carbon, provides a medium for the formation of disinfection

Total Organic Carbon (TOC) has no health effects. However, total organic carbon, provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes, or THMs, and haloacetic acids, or HAAs. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

There is nothing you need to do at this time. You do not need to use an alternative (e.g., bottled) water supply.