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

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.



East Logan Water District Water Quality Report 2019



Water System ID: KY0710951 Manager: Linda Alexander 270-717-0991 CCR Contact: Linda Alexander

Mailing address: 333 S. Franklin Street Russellville, KY 42276

Meeting location and time: 333 S. Franklin Street Last Tuesday each month at 9:00 AM 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.

East Logan Water District purchases water from Logan/Todd Regional Water Commission (LTRWC) located in Guthrie, KY. LTRWC treats surface water from the Cumberland River with a raw water intake located in Clarksville, TN. A small portion of downtown Clarksville is located near the intake, thereby potentially contributing urban runoff of sediment, oil and grease, road salt, fertilizers, pesticides, nutrients, toxics, and other contaminants. Transportation corridors pose a significant threat to water quality due to the risk of accidents releasing substances into the river. A state primary road – TN 13 – crosses the Cumberland River, as do the Cunningham Bridge and the L&N Railroad bridge. For more information regarding the LTRWC source water protection area and plan, contact LTRWC at 270-483-6990 or contact the central office of the TN Division of Water Supply. For information about contaminant sources further upstream, see Clarksville (TN) Water System's Source Water Assessment. 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.



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.

of this report are available upo	on request b	y contacting our o	office during	business	hour	s.			
Regulated Contamina	nt Test R	esults - Loga	an/Todd F	Regional	l W	ater Comn	nission		
Contaminant			Report	rt Range		Date of	Violation	Likely Source of	
[code] (units)	MCL	MCLG	Level	of	of Detection		Sample		Contamination
Barium									Drilling wastes; metal refineries;
[1010] (ppm)	2	2	0.021	0.021	to	0.021	2019	No	erosion of natural deposits
Fluoride									Water additive which promotes strong teeth
[1025] (ppm)	4	4	0.719	0.719	to	0.719	2019	No	
Nitrate									Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
[1040] (ppm)	10	10	0.168	0.168	to	0.168	2019	No	
Total Organic Carbon (ppm)			1.26						
(measured as ppm, but	TT*	N/A	(lowest	1.5	to	1.81	2019	No	Naturally present in environment
reported as a ratio)			average)	(mo	nthly	ratios)			
*Monthly ratio is the % TOC r	emoval achi	eved to the % TO	C removal re	quired. Ar	ınual	average must	be 1.00 or gre	ater for com	oliance.
Source Water Contam	inants (u	ntreated wat	ter)						
Cryptosporidium	0	TT	1 (positive samples)		12 (no. of samples)		2019	See Note	Human and animal fecal waste
[oocysts/L]		(99% removal)						Below	
Other Constituents									
Turbidity (NTU) TT	Allowable		Highest Single		Lowest		Violation		
* Representative samples	Levels		Measurement			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		0.084			100	No		Soil runoff

Cryptosporidium is a microbial pathogen found in surface water. Cryptosporidium was detected in 1 sample of 12 collected from the raw water source for our water system. It was not detected in the finished water. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Cryptosporidium must be ingested to cause disease and it may be spread through means other than drinking water.

95% of monthly samples

Regulated Contaminant Test Results East Logan Water District											
Contaminant			Report	Range		Date of	Violation	Likely Source of			
[code] (units)	MCL	MCLG	Level	of Detection			Sample		Contamination		
Chlorine	MRDL	MRDLG	1.34						W. 110		
(ppm)	= 4	= 4	(highest	0.87	to	1.98	2019	2019 No	Water additive used to control microbes.		
			average)								
HAA (ppb) (Stage 2)			41						D 1		
[Haloacetic acids]	60	N/A	(high site	19	to	58	2019	No	Byproduct of drinking water disinfection		
			average)	(range o	findiv	idual sites)			districction		
TTHM (ppb) (Stage 2)			62						D 1 (C1'1'		
[total trihalomethanes]	80	N/A	(high site	26	to	91	2019	No	Byproduct of drinking water disinfection.		
			average)	(range o	findiv	idual sites)					
Household Plumbing Contaminants											
Copper [1022] (ppm)	AL=		0.0116						C		
sites exceeding action level	1.3	1.3	(90th	0	to	0.0559	Aug-18	No	Corrosion of household plumbing systems		
0			percentile)								

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct one Level 1 assessment. One Level 1 assessment was completed. In addition, we were required to take one corrective action and we completed one of these actions.

Our Mission

East Logan Water District takes pride in being your local water company. We are committed to conserving our most precious natural resource and to continually deliver on our promise to ensure our customers have a high-quality affordable and dependable water supply. We will commit to provide reliable service to our customers as we manage our infrastructure to meet present and future needs of our customers and the community.

