## 2020 Water Quality Report

Adairville Waterworks

## KY0710001

Manager: Jimmy Laurent Contact: Jimmy Laurent Phone: (270) 539-6731 Address: P.O. Box 185 Adairville, Ky. 42202 Meetings: City Hall, 110 Main Street, Adairville, KY Public Meetings 2nd Mon.of each month 6:00 PM

Adairville Waterworks ("A" in table page-PWSID KY0710001)purchases water from the Logan-Todd Water Commission ("B" in Table page-PWSID KY1101005). The intake is located in the Cumberland River which is classified as surface water. The protection area taken into consideration is from the LTRWC intake point to the Clarksville Water System intake upstream. Urban nonpoint source runoff may contibute contamination to the to the water supply by delivering sediment, oil and grease, road salt, fertilizers, pesticides, nutrients and other contaminants. Transportation accidents can threaten water quality. Tractor-trailers, barges, rail cars and pipelines all have the potential for adverse impact of our water supply. A state primary road - Tn 13 - crosses the Cumberland River, as do the Cunningham Bridge and the L&N Railroad bridge. For source water protection information, contact LTRWC (270) 483-6990 located at 248 Tower Street in Guthrie, Ky. or contact the central office of the

Tn, Division of Water Supply. We would like to encouage our customers to call in any water leaks or activities of intrest to the water office at (270)

### 539-6731.

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.

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 Contamina	int rest N	esuits - Log	an/ rodd P	regiona	I Wa	iter Com	mission		1
Contaminant			Report		Rang	ge	Date of	Violation	Likely Source of
[code] (units)	MCL	MCLG	Level	0	f Dete	ction	Sample		Contamination
Barium									
[1010] (ppm)	2	2	0.0182	0.0182	to	0.0182	2020	No	Drilling wastes, metal refineries; erosion of natural deposits
Fluoride								1	
[1025] (ppm)	4	4	0.686	0.686	to	0.686	2020	No	Water additive which promotes strong teeth
Nitrate					-				Fertilizer runoff, leaching from
[1040] (ppm)	10	10	0.579	0.579	to	0.579	2020	No	septic tanks, sewage, erosion of natural deposits
Total Organic Carbon (ppm)			1.74						
(measured as ppm, but	TT*	N/A	(lowest	1.73	to	1.98	2020	No	Naturally present in environment
reported as a ratio)			average)	(11)	nthly	ratios)			
*Monthly ratio is the % TOC	removal achie	ved to the % T	OC removal re	quired A	nnual	average mus	t be 1.00 or gre	ater for com	pliance
Other Constituents				_	1				
Turbidity (NTU) TT	Allowable Levels		Highest Single Measurement			Lowest	Violation		
* Representative samples					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 95% of monthly samples		0.079			100	No	Soil runoff	

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<b>Regulated Contamina</b>	int Test Re	esults	Adairville	Waterworks			
Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Disinfectants/Disinfe	ction Byp	roducts and	Precursors				
Chlorine (ppm)	MRDL =4	MRDLG =4	1,30 (highest average)	0.53 to 1.89	2020	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	30 (high site average)	17 to 40 (range of individual sites)	2020	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	60 (high site average)	29 to 88 (range of individual sites)	2020	No	Byproduct of drinking water disinfection.
Household Plumbing	Contamin	ants					
Copper [1022] (ppm) sites exceeding action level	AL= 1.3	1.3	0.0191 (90 <sup>th</sup> percentile)	0.0018 to 0.0261	Jun-20	No	Corrosion of household plumbing systems