



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.

M = MOUNTAIN WATER DISTRICT (KY0980575)			P = PIKEVILLE WATER DEPARTMENT (KY0980350)			W = WILLIAMSON WATER BOARD (WV3303009)								
OTHER CONSTITUENTS														
<b>TURBIDITY (NTU) TT</b> * Representative Samples		<b>ALLOWABLE LEVELS</b>		<b>SOURCE</b>	<b>HIGHEST SINGLE MEASUREMENT</b>		<b>LOWEST MONTHLY %</b>	<b>VIOLATION</b>						
Turbidity (NTU) TT * Representative samples of filtered water		No more than 1 NTU*		M=	0.29		100	No						
		Less than 0.3 NTU in 95% monthly samples		P=	0.21		100	No						
		W=			0.8		N/A	No						
Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range		Date	Violation	Likely Source of Contamination					
INORGANIC CONTAMINANTS														
<b>Barium (ppm)</b> [1010]	2	2	M=	0.048	0.048	to	0.048	Apr - 24	No	Drilling wastes; metal refineries; erosion of natural deposits				
			P=	0.073	0.073	to	0.073	Aug - 24	No					
			W=	0.074	0.074	to	0.074	Jun - 24	No					
<b>Fluoride (ppm)</b> [1025]	4	4	M=	0.67	0.47	to	0.71	Apr - 24	No	Water additive which promotes strong teeth				
			P=	0.7	0.7	to	0.7	Aug - 24	No					
			W=	0.81	0.46	to	0.81	Nov - 24	No					
RADIOLOGICAL CONTAMINANTS														
<b>Combined Radium (pCi/L)</b>	5	0	M=	0.298	0.298	to	0.298	May - 20	No	Erosion of natural deposits				
			P=	1.4	1.4	to	1.4	May - 20	No					
			W=	0.112	0.112	to	0.112	Feb - 19	No					
<b>Total Uranium (µg/L)</b>	30	0	M=	0.355	0.355	to	0.355	May - 20	No	Erosion of natural deposits				
DISINFECTANTS / DISINFECTION BYPRODUCTS AND PRECURSORS														
<b>Total Organic Carbon (ppm)</b> (report level=lowest avg. range of monthly ratios)	TT*	N/A	M=	1.10	1	to	1.48	2024	No					
			P=	0.98	-0.22	to	1.82	2024	No**	Naturally present in environment				
			W=	2.2	0.9	to	1.22	2024	No					
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance. **Pikeville has been approved by the Division of Water to use an alternative compliance method.														
<b>Chlorine (ppm)</b>	MRDL = 4	MRDLG = 4	M=	1.83 (highest average)	0.31	to	2.83	2024	No	Water additive used to control microbes				
<b>HAA (ppb) (Stage 2) [Haloacetic acids]</b>	60	N/A	M=	48 (high site average)	10	to	63 (range of individual sites)	2024	No	Byproduct of drinking water disinfection				
<b>TTHM (ppb) (Stage 2) [Total trihalomethanes]</b>	80	N/A	M=	94 (high site average)	21	to	140 (range of individual sites)	2024	Yes	Byproduct of drinking water disinfection				
<b>TTHM (ppb) Individual Site</b>	<b>Qtr 1</b>	<b>Qtr 2</b>	<b>Qtr 3</b>	<b>Qtr 4</b>	<b>Violation</b>									
027	0.021	0.03	0.122	0.14	No									
114	0.045	0.06	0.097	0.107	Yes									
123	0.027	0.043	0.057	0.075	No									
907	0.045	0.066	0.13	0.134	Yes									
HOUSEHOLD PLUMBING CONTAMINANTS														
<b>Copper (ppm)</b> [1022] (Sites exceeding action level - 0)	AL = 1.3	1.3	M=	0.017 (90 <sup>th</sup> percentile)	0	to	0.031	Aug - 2023	No	Corrosion of household plumbing systems				
<b>Lead (ppb)</b> [1030] (Sites exceeding action level - 0)	AL = 15	0	M=	0 (90 <sup>th</sup> percentile)	0	to	7	Aug - 2023	No	Corrosion of household plumbing systems				
UNREGULATED CONTAMINANTS (UCMR 5)														
<b>Lithium</b>		M=		3.25	0	to	12	1/11/2024						

Your drinking water has been sampled for a series of unregulated contaminants. Unregulated contaminants are those that EPA has not established drinking water standards. There are no MCLs and therefore no violations if found. The purpose of monitoring for these contaminants is to help EPA determine where the contaminants occur and whether they should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact our office during normal business hours.

**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 (NA):** 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 (pb)** or micrograms per liter (ug/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 one 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 a single penny in \$10,000,000,000,000.

**Picocuries Per Liter (pCi/L):** A measure of the radioactivity in water.

**Millirems Per Year (mrem/yr):** A 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 of 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.

**Source Water Assessment**

The Safe Water Drinking Act Amendments of 1996 require every water system to prepare a source water assessment that addresses the system's susceptibility to potential sources of contamination. Summaries of the assessments for the three service areas are as follows:

**Marrowbone Area:** The source water protection area is highly influenced by coal mining industries and the Breaks Interstate Park. The area is also highly influenced by commercial and industrial businesses, traffic flow, and the location of major railways. Other areas of concern include non-point sources of pollution originating from activities such as agriculture, mining, and road construction. Within the greater source water protection area, potential contaminant sources of concern include 1 major road, 2 railroads, 3 small sewage plants, 2 areas of waste generation or transportation, 10 bridges and culverts, and 2 points of active mining activity. Each of these potential sources of contamination is rated high in a susceptibility analysis because of the contaminant type, their proximity to the intake and the high chance of release. This completed plan is available for review at the main office at Mountain Water located at 6332 Zebulon Highway.

**Pikeville Area:** Activities and land uses upstream of the Pikeville Water Department source of water can pose potential risks to your drinking water. An analysis of the susceptibility of the Pikeville Water Department raw water supply to contamination has been completed. The area is highly influenced by commercial and industrial businesses, traffic flow on U.S. 23, and the location of major railways. As with most of Kentucky's surface water sources of supply, Pikeville Water Department is subjected to non-point pollution from various activities such as agriculture, mining, and road construction. Within the greater source protection area, potential contaminant sources of concern include 3 major roads, 1 railroad, 4 small sewage plants, 1 active contained landfill, 9 bridges and culverts, and 3 points of active mining activity. Each of these potential sources of contamination is rated high in a susceptibility analysis because of the containment type, their proximity to the intake, and the high chance of release. The final source water assessment has been completed by the Big Sandy Area Development District and is available for inspection at their office, the Pike County Judge's office, and the Pikeville/Pike County public library.

**Williamson Area:** This was completed in 2003 by the West Virginia Bureau for Public Health. The intake that supplies drinking water to Williamson Utility Board has a higher susceptibility to contamination, due to the sensitive nature of surface water supplies and the potential contaminant sources identified within the area. This does not mean that this intake will become contaminated; only that conditions are such that the surface water could be impacted by a potential contaminant source. Future contamination may be avoided by implementing protective measures. The source water assessment report, which contains more information, is available for review, or a copy will be provided to you at the Williamson Utility Board office during regular business hours.

**About our Violations:**

Total Trihalomethanes (2024-9950645 / 2024-9950644) - The Mountain Water District received violations for exceeding the MCL for Trihalomethanes (TTHM) during the 1st, 2nd, 3rd and 4th quarters of 2024, predominantly at site 907 in the Elkhorn Creek area and one violation at site 114 in the Stopover area. The MCL for TTHM is based on a running annual average of 0.080 mg/L. At site 907, our average for the 1st quarter was 0.090 mg/L, 2nd quarter was 0.091 mg/L, 3rd quarter was 0.089 mg/L, and the 4th quarter was 0.094 mg/L. At site 114, our average for the 2nd quarter was 0.081 mg/L. Public notices have been issued for all violations. This is not an emergency. If it had been an emergency, you would have been notified within 24 hours. **HEALTH EFFECTS:** TTHMs (Total Trihalomethanes) Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. 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.

Spanish (Español): Este informe contiene información muy importante sobre la calidad de su agua beber. Hable con alguien que lo entienda bien. Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.