# 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 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 request a paper copy call (606) 256-8283.



Water System ID: KY1020891 Manager: Paula DeBorde 606-256-8283 CCR Contact: Paula DeBorde

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Mailing address: P.O. Box 627 Mt. Vernon, KY 40456

Meeting location and time: Water Office – 435 Highway 150 Second Tuesday each month at 1:00 PM

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 Purchased From Mt. Vernon

Western Rockcastle Water Association purchases water from Brodhead Water Works and Southern Madison Water District. Most of our customers are served by Brodhead Water Works which purchases from Mt Vernon Works which treats surface water from Lake Linville located in Renfro Valley. The source water assessment completed for the Mt. Vernon supply indicates that its susceptibility to contamination is generally moderate. The areas of concern are agricultural activities, failing septic systems, highways and railroads. In addition, pesticides and herbicides application and the potential for chemical spills pose a threat to the water source.

#### Water Purchased From Southern Madison

Water for our customers in Flat Gap is purchased from Southern Madison Water District which purchases water from Berea Municipal Utilities. The City of Berea treats surface water from four reservoirs, Upper Silver Creek, Lower Silver Creek, Cowbell and Owsley Fork Lakes. An analysis of the susceptibility to contamination of Berea's water source is generally moderate. The areas of concern are agricultural activities, failing septic systems, highways and railroads. In addition, pesticides and herbicides application and the potential for chemical spills pose a threat to the water sources.

The complete source water assessments can be reviewed at Mount Vernon Water Works and Berea Municipal Utilities.

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:**

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 water system is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact your local water system. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available 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.

Regulated Contamina	nt Test R	esults	Bere	ea Munici	ipal Uti	<u>liti</u> e	s (B) N	At. Vernon	Water W	orks (M)
Contaminant			rce	Report		Rang	ge	Date of		Likely Source of
[code] (units)	MCL	MCLG	Source	Level	of Detection		Sample	Violation	Contamination	
Radioactive Contamin	nants									
Combined radium	5	0	B=	0.42	0.42	to	0.42	2020	No	
(pCi/L)										Erosion of natural deposits
Inorganic Contaminar	its							ļ	ļ	
Barium			В=	0.013	0.013	to	0.013	2023	No	Drilling wastes; metal refineries;
[1010] (ppm)	2	2								erosion of natural deposits
			M=	0.021	0.021	to	0.021	2023	No	•
Fluoride			В=	0.82	0.82	to	0.82	2023	No	Water additive which promotes
[1025] (ppm)	4	4								strong teeth
			M=	0.58	0.58	to	0.58	2023	No	· ·
Nickel (ppb)										
(US EPA remanded MCL	N/A	N/A								N/A
in February 1995.)			M=	6	6	to	6	2023	No	
Nitrate										Fertilizer runoff; leaching from
[1040] (ppm)	10	10								septic tanks, sewage; erosion of
			M=	0.406	0.406	to	0.406	2023	No	natural deposits
Disinfectants/Disinfec	tion Byp	roducts a	nd P	recursors	8					
Total Organic Carbon (ppm)			В=	1.32	1.00	to	1.85	2023	No	
(report level=lowest avg.	TT*	N/A								Naturally present in environment.
range of monthly ratios)			M=	1.65	1.14	to	2.89	2023	No	

<sup>\*</sup>Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.

## Other Constituents

Turbidity (NTU) TT	Allowable	urce	Highest Single	Lowest	Violation	
* Representative samples	Levels	So	Measurement	Monthly %		Likely Source of Turbidity
	No more than 1 NTU*	B=	0.306	99	No	
clarity of the water and not a contaminant.	Less than 0.3 NTU in					Soil runoff
	95% monthly samples	M=	0.05	100	No	

Regulated Contaminar	nt Test R	esults	Western Ro	ockcast	le W	ater Asso	ciation	•	·
Contaminant		Report Range		ge	Date of		Likely Source of		
[code] (units)	MCL	MCLG	Level	of Detection		Sample	Violation	Contamination	
Disinfectants/Disinfec	tion Byp	roducts and	Precursors						
Chlorine	MRDL	MRDLG	1.47						W. 1122
(ppm)	= 4	= 4	(highest	0.6	to	2.17	2023	No	Water additive used to control microbes.
į			average)					innerooes.	
HAA (ppb) (Stage 2)			47						
[Haloacetic acids]	60	N/A	(high site	26	to	56	2023	No	Byproduct of drinking water disinfection
			average)	(range of individual sites)					distriction
TTHM (ppb) (Stage 2)			47						
[total trihalomethanes]	80	N/A	(high site	23.3	to	61.4	2023	No	Byproduct of drinking water disinfection.
			average)	(range o	of indiv	idual sites)			districction.
Household Plumbing	Contami	nants							
Copper [1022] (ppm) Round 1	AL=		0.044						
sites exceeding action level	1.3	1.3	(90 <sup>th</sup>	0.009	to	0.168	Aug-23	No	Corrosion of household plumbing systems
0			percentile)						
Lead [1030] (ppb) Round 1	AL=		6						
sites exceeding action level	15	0	(90 <sup>th</sup>	0	to	10	Aug-23	No	Corrosion of household plumbing systems
0			percentile)						Systems

