## 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

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.

microbial contaminants.

**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.



## Wilmore Water Works Water Quality Report 2022

To request a paper copy call (859) 858-4411.

Water System ID: KY0570010 Utilities & Public Works Director: Dave Carlstedt 859-858-4251

CCR Contact: James Zweifel

859-858-4711

jzweifel@wilmore.org

Mailing address: 210 South Lexington Avenue Wilmore, KY 40390

Meeting location and time: Wilmore City Hall - 210 South Lexington Ave 1<sup>st</sup> and 3<sup>rd</sup> Monday each month at 6:00 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.

Wilmore Water Works treats surface water from Pool 6 of the Kentucky River. An analysis of the susceptibility of the Wilmore Water Works water supply to contamination indicates that its susceptibility is generally moderate. There are, however, a few areas of high concern. A railroad bridge and a highway bridge pose immediate threats to the intake in the event of an accidental release of contaminants from either of these sites. Furthermore, agricultural activities in the watershed create the potential for pesticide and fertilizer use that could contaminate the water source. Finally, there are numerous permitted operations and activities and other potential contaminant sources within the watershed that cumulatively increase the potential for the release of contaminants. These potential contaminant sources include everything from large capacity septic systems, to major roads, to underground storage tanks, to Tier II hazardous chemical users. The complete Source Water Assessment is available for review at Wilmore City Hall during normal business hours.

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.

this report are available upon i			ice during busir	ness hours.						
Regulated Contamina	nt Test R	esults	Wilmore V	Vater Wo	rks					
Contaminant			Report	Range of Detection		Date of		Likely Source of		
[code] (units)	MCL	MCLG	Level			Sample	Violation	on Contamination		
Inorganic Contaminar	its									
Barium [1010] (ppm)	2	2	0.01	0.01 t	to	0.01	May-22	No	Drilling wastes; metal refineries; erosion of natural deposits	
Fluoride [1025] (ppm)	4	4	1.03	1.03 t	to	1.03	May-22	No	Water additive which promotes strong teeth	
Disinfectants/Disinfec	tion Byp	roducts and	Precursors							
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.69 (lowest average)		to thly ra	1.85	2022	No	Naturally present in environment.	
*Monthly ratio is the % TOC re	emoval achi	eved to the % TO	C removal requi	red. Annual	averaş	ge must be	1.00 or greater	for complian	ice.	
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.25 (highest average)	0.52 t	to	1.95	2022	No	Water additive used to control microbes.	
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	47 (high site average)	20 t	to ndivid	68 lual sites)	2022	No	Byproduct of drinking water disinfection	
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	67 (high site average)	24 t	to ndivid	70.5	2022	No	Byproduct of drinking water disinfection.	
Household Plumbing	Contami	nants	, , , , ,						-	
Copper [1022] (ppm) Round 1 sites exceeding action level	AL = 1.3	1.3	0.019 (90 <sup>th</sup> percentile)	0 t	to	0.057	Apr-22	No	Corrosion of household plumbing systems	
Copper [1022] (ppm) Round 2 sites exceeding action level	AL= 1.3	1.3	0.024 (90 <sup>th</sup> percentile)	0 t	to	0.074	Oct-22	No	Corrosion of household plumbing systems	
Lead [1030] (ppb) Round 1 sites exceeding action level	AL= 15	0	0 (90 <sup>th</sup> percentile)	0 t	to	4	Apr-22	No	Corrosion of household plumbing systems	
Lead [1030] (ppb) Round 2 sites exceeding action level 0	AL= 15	0	0 (90 <sup>th</sup> percentile)	0 t	to	12	Oct-22	No	Corrosion of household plumbing systems	

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 95% of monthly samples	0.17		100	No	Soil runoff
		Average	Range of	Detection		
Fluoride (added for dental health)		0.9	0.64 to	1.14		
Sodium (EPA guidance level = 20 mg/L)		7.0	7 to	7		
Sacandary contaminante do no	at have a direct impact on the	hoolth of concu	mare Thay are	haina inaluda	d to provido	

Secondary contaminants do not have a direct impact on the health of consumers. They are being included to provide additional information about the quality of the water.

Secondary Contaminant		Report	Range	Date of	
Secondary Contaminant	Maximum Allowable Level	Level	of Detect	Sample	
Aluminum	0.05 to 0.2 mg/l	0.11	0.11 to	0.11	May-22
Chloride	250 mg/l	10	10 to	10	May-22
Corrosivity	Noncorrosive	-0.74	-0.74 to	-0.74	May-22
Fluoride	2.0 mg/l	0.98	0.98 to	0.98	May-22
Iron	0.3 mg/l	0.02	0.02 to	0.02	May-22
pН	6.5 to 8.5	7.6	7.6 to	7.6	May-22
Sulfate	250 mg/l	46	46 to	46	May-22
Total Dissolved Solids	500 mg/l	128	128 to	128	May-22

