## Maysville Utility Commission Water Quality Report 2022

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We are pleased to present this Annual Water Quality Report. The main source of water for Maysville customers is surface water from the Ohio River. This report is designed to inform the public about the quality of the water and services provided on a daily basis. The following is a summary of the system's susceptibility to contamination, which is part of the complete Source Water Assessment Plan (SWAP), and is available for inspection at the Buffalo Trace Area Development District office in Maysville. An analysis of the susceptibility of the Maysville Utility Commission water supply to contamination indicates that the susceptibility is generally high. There are several areas of high concern near the raw water withdrawal site. These sites of high concern include: Ports along the Ohio River where accidental spills of chemicals and petroleum products can occur, bridges located near the intake site, railroads and agricultural areas. Other sites of medium concern include an historical landfill site and an abandoned oil or gas well. The full test of the source water assessment can be viewed at the Buffalo Trace Area Development District office in Maysville.

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 storm water runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (storm water 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, storm water 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 \$10,000,000,000,000.

**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 Contaminant Test Results Maysville Utility Commission									
Contaminant			Report	eport Range		Date of		Likely Source of	
[code] (units)	MCL	MCLG	Level	of Detection		Sample	Violation	Contamination	
Inorganic Contaminants									
Barium [1010] (ppm)	2	2	0.032	0.032 to	0.032	Jan-22	No	Drilling wastes; metal refineries; erosion of natural deposits	
Fluoride [1025] (ppm)	4	4	0.73	0.73 to	0.73	Jan-22	No	Water additive which promotes strong teeth	
Nitrate [1040] (ppm)	10	10	0.785	0.785 to	0.785	Jan-22	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits	
Disinfectants/Disinfection Byproducts and Precursors									
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.33 (lowest average)	1.00 to (month	1.65 ly ratios)	2022	No	Naturally present in environment.	
*Monthly ratio is the % TOC	removal ac	hieved to the %	TOC removal	required. Ann	nual average m	ust be 1.00 o	r greater fo	or compliance.	
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.31 (highest average)	0.41 to	1.96	2022	No	Water additive used to control microbes.	
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	29 (high site average)	14 to	33 dividual sites)	2022	No	Byproduct of drinking water disinfection	
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	71 (high site average)	26 to	119 dividual sites)	2022	No	Byproduct of drinking water disinfection.	
Household Plumbing Cont	aminants			•		•	•	•	
Copper [1022] (ppm) Round 1 sites exceeding action level 0	AL = 1.3	1.3	0.025 (90 <sup>th</sup> percentile)	0.003 to	0.129	Jul-22	No	Corrosion of household plumbing systems	
Lead [1030] (ppb) Round 1 sites exceeding action level 0	AL =	0	0 (90 <sup>th</sup> percentile)	0 to	6	Jul-22	No	Corrosion of household plumbing systems	
Other Constituents									
Turbidity (NTU) TT	Allowable Highest Si		ngle Lowest		Violation				
* Representative samples	Levels Me		Measurem	Measurement			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		0.22	2 100		No	Soil runoff		

	Average	Range of Detection			
Fluoride (added for dental health)	0.9	0.39 to 1.14			
Sodium (EPA guidance level = 20 mg/L)	20.7	20.7 to 20.7			

Secondary Contaminant	Maximum Allowable	Report		Ran	Date of	
	Level	Level	of Detection			Sample
Aluminum	0.05 to 0.2 mg/l	0.02	0.02	to	0.02	Jan-22
Chloride	250 mg/l	25	25	to	25	Jan-22
Color	15 color units	2	2	to	2	Jan-22
Corrosivity	Noncorrosive	-1.31	-1.31	to	-1.31	Jan-22
Fluoride	2.0 mg/l	0.74	0.74	to	0.74	Jan-22
рН	6.5 to 8.5	7.27	7.27	to	7.27	Jan-22
Sulfate	250 mg/l	44.9	44.9	to	44.9	Jan-22
Total Dissolved Solids	500 mg/l	78	78	to	78	Jan-22

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.