Maysville Utility Commission Water Quality Report 2023

Water System ID: KY0810275 Manager: Darin Spence 606-564-3531 CCR Contact: Kevin Purdon 606-564-2513 Mailing Address: P.O. Box 406 Maysville, KY 41056 Meeting location and time: 216 Bridge St, Maysville 2nd Thursday, monthly at 5:15 PM

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).

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.

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.

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.

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	t Test Re	sults	Maysville U	Jtility Com	nission		-	
Contaminant			Report Range			Date of		Likely Source of
[code] (units)	MCL	MCLG	Level	of Det	ection	Sample	Violation	Contamination
Inorganic Contaminant	S		•				-	
Barium								
[1010] (ppm)	2	2	0.033	0.033 to	0.033	Feb-23	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	0.54	0.54 to	0.54	Feb-23	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	0.829	0.829 to	0.829	Feb-23	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Synthetic Organic Cont	aminants	including P	esticides and	Herbicides				
Atrazine		8						Runoff from herbicide used on row
[2050] (ppb)	3	3	BDL	BDL to	0.8	Jun-23	No	crops
Disinfectants/Disinfection	on Bypro	ducts and P	recursors					1
Total Organic Carbon (ppm)			1.46					
(measured as ppm, but	TT*	N/A	(lowest	1.08 to	2.14	2023	No	Naturally present in environment.
reported as a ratio)			average)	(month)	y ratios)			
*Monthly ratio is the % TOC rem	noval achieve	ed to the % TOC 1	removal required.	Annual average	must be 1.00 o	r greater for co	mpliance.	
Chlorine	MRDL	MRDLG	1.31					
(ppm)	= 4	= 4	(highest	0.29 to	1.97	2023	No	Water additive used to control microbes.
			average)					
HAA (ppb) (Stage 2)			28					
[Haloacetic acids]	60	N/A	(high site	17 to	30	2023	No	Byproduct of drinking water disinfection
			average)	(range of ind	ividual sites)			distillection
TTHM (ppb) (Stage 2)			74		,			
[total trihalomethanes]	80	N/A	(high site	28 to	95	2023	No	Byproduct of drinking water disinfection.
			average)	(range of ind	ividual sites)			disinfection.
Household Plumbing Co	ontamina	ints			,		-!	
Copper [1022] (ppm) Round 1	AL=		0.025					
sites exceeding action level	1.3	1.3	(90 th	0.003 to	0.129	Jul-22	No	Corrosion of household plumbing
0			percentile)					systems
Lead [1030] (ppb) Round 1	AL =		0					
sites exceeding action level	15	0	(90 th	0 to	6	Jul-22	No	Corrosion of household plumbing
0			percentile)					systems
Other Constituents		<u> </u>	, ,	4			-	
Turbidity (NTU) TT	Allowable		Highest Single		Lowest	Violation		
* Representative samples	Levels		Measurement		Monthly %		Likely Source of Turbidity	
Turbidity is a measure of the	No more than 1 NTU*							
clarity of the water and not a	Less than 0.		0.146		100	No	Soil runoff	
contaminant.	95% of monthly samples		0.110		100	110		
			Avorage	Denge eft	Detection	1	1	
Fluoride (added for dental health)			Average Range of I				Your drink	ing water has been sampled for a
				control control not 23.6 23.6 to 23.6 series of unregulated contaminants are the		regulated contaminants.		
Sodium (EPA guidance level = 20 mg/L) Unregulated Contaminants (UCMR 5)								Unregulated contaminants are those that EPA
Unregulated Contamina	nts (UC	WIK 5)	average	range (pp	(0)	date		blished drinking water standards o MCLs and therefore no
Lithium			3.250	0 to	13 Mar-23		violations i	f found. The purpose of for these contaminants is to help

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

This report will not be mailed unless requested. Contact our office if you would like a copy mailed to you.

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.