2021 Water Quality Report

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Wickliffe Municipal Water

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Meetings: City Hall 321 Court st. Wickliffe, KY 42087 2nd Thursday, Monthly at 4:00 PM

The City of Wickliffe uses groundwater supplied by 3 wells, which withdraws water from the Ecocene sands group. The wells reach 300 feet in depth and were constucted in 1985 and 1991. There is no history of source water quality problems or violations. The wellhead protection areas are rural residential with few businesses. Most of the wellhead protection area is forested land owned by private residents and Newpage paper mill. The majority of WHPA 3 is owend by Newpage and maintained as forest. The majority of the potential contaminants sources are considered to be low risk to the aquifer. The land within the wellhead protection area is also a low risk as the land is predominantly forest and residential. Additionally, the wells are deep enough to have some natural protection from contaminants. Given each of these factors, the aquifers susceptibility to contamination is determined to be low. The wellhead management plan should direct priority to a public education initiative and emergency response planning to possible highway or railroad spills. This Wellhead Protection Plan may be obtained at Purchase Area Development District, 1002 Medical Drive Mayfield.KY 42066 (270) 251-6132.

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. 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, ($\mu g/L$). 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 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 Contaminan	t Test Res	sults	Wickliffe M	unicipa	l Wat	er				
Contaminant			Report	Range of Detection		ge	Date of Violation		Likely Source of	
[code] (units)	MCL	MCLG	Level			Sample		Contamination		
Radioactive Contamina	nts		•	•						
Alpha emitters	15	0	1.5	1.5	to	1.5	Apr-17	No	Erosion of natural deposits	
[4000] (pCi/L)									Erosion of natural deposits	
Combined radium	5	0	1.18	1.18	to	1.18	Apr-17	No	Erosion of natural deposits	
(pCi/L)									Elosion of natural deposits	
Inorganic Contaminan	ts									
Fluoride									Water additive which promotes	
[1025] (ppm)	4	4	0.10	0.1	to	0.1	Nov-19 No		strong teeth	
Disinfectants/Disinfecti	on Rypro	ducts and Pr	PACUESOES							
*Monthly ratio is the % TOC 1				red Annu	al aver	age must be	1 00 or greater	for complia	nce	
Chlorine	MRDL	MRDLG	1.22	Ica. Allila	ai avcia	ige musi be	1.00 of greater	Tor compila	Tunice.	
(ppm)	= 4	= 4	(highest	1.1	to	1.31	2021 No	No	Water additive used to control	
(ррш)		7	average)	1.1	10	1.51	2021	110	microbes.	
TTHM (ppb) (Stage 2)			1							
[total trihalomethanes]	80	N/A	(high site)	1	to	1	2021	No	Byproduct of drinking water	
(Annual Sample)			(g.:)	(range	(range of individual sites)				disinfection.	
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Household Plumbing C	ontamina	nts								
Copper [1022] (ppm)	AL =		0.27							
sites exceeding action level	1.3	1.3	(90 th	0	to	0.32	Dec-20 No		Corrosion of household plumbing systems	
0			percentile)							
Lead [1030] (ppb)	AL =		0				Dec-20 No		Corrosion of household plumbin	
sites exceeding action level	15	0	(90 th	0	to	2.5				
0			percentile)						by sterns	
	Average Range of Detection									
Sodium (EPA guidance level = 20 mg/L)			8.7	8.7	to	8.7				

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	Maximum Allowable	Report	Range	Date of
,	Level	Level	of Detection	Sample
Iron	0.3 mg/l	2.3	2.3 to 2.3	Jan-21

If you would like to request a copy of or have any questions regarding this report, please contact Mr. Guy Johnson at the Wickliffe Water Works office or by calling (270) 335-3557.