

City of Pikeville Water Quality Report for year 2020

306 Island Creek Road Pikeville, KY 41501

City Hall Meeting Room Meetings: 2nd and 4th Mondays Meeting Dates and Time:

6:00 PM

Donnie Slone Manager:

606-200-7343 Phone:

KY0980350

Ralph Varney CCR Contact: 606-262-4230 Phone:

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 our customers with 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 is the most indispensable product in every home and we ask everyone to be conservative and help us in our efforts to protect the water source and the water system.

We at Utility Management Group Pikeville treat surface water from the Levisa Fork of the Big Sandy River. Activities and land uses upstream of Pikeville Water Department source of water can pose potential risks to your drinking water. The area is highly influenced by commercial and industrial businesses, traffic flow on US 23, and the location of major railways. Pikeville Water Department is subjected to non-point pollution from various activities such as agriculture, mining and road construction. Within the greater source water protection area potential contaminant sources of concern include 3 major roads, 1 railroad, 4 small sewage plants, 1 active contained landfill, 1 active superfund site, 9 bridges and culverts, and 3 points of active mining activity. Each of these potential sources of contamination is rated high in a susceptibility analysis because of the contaminant type, their proximity to the intake, and the high chance of release. The complete source water assessment can be found at the Big Sandy Area Development District, the Pike County Judge's office, and the Pikeville/Pike County public library.

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).

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 If present, elevated levels of lead can cause 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 to 2 minutes before using water for drinking 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 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.

Information About Lead:

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. The City of Pikeville 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 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.

)	SODIUM	During the year of 2020
d	2/11/2020 Testing 38.4	buting the year of 2020 sodium testing was performed in our system. Even though this is only from 1 test during the year knowing the amount of sodium found in our water may be beneficial to some of our customers.
r	20 mg/L is considered ideal.	

The data presented in this report are from the most recent testing done during 2020 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. Unless otherwise noted, the report level is the highest level detected.

otherwise noted, the report le	ver is the mg	nest level detected		est Single	T	Lowest			
	Allowable Levels		Measurement		N	Monthly % Violation		Likely Source	
Turbidity (NTU) TT No more than 1 NTU		e than 1 NTU*	0.24				No		
* Representative samples	Less than 0.3 NTU in					100.0		Soil runoff	
of filtered water	95% of monthly samples								
Regulated Contamina	nt Test R	esults			-			I	
Contaminant			Report	_			Date of		
[code] (units)	MCL	MCLG	Level	Range of Detection		etection	Sample	Violation	Likely Source of Contamination
Radioactive Contamir	nants								
Combined radium									
(pCi/L)	5	0	0.74	0.736	to	0.736	May-20	No	Erosion of natural deposits
Inorganic Contamina	nts		<u>. </u>					<u> </u>	Į.
Barium									
[1010] (ppm)	2	2	0.077	0.077	to	0.077	Aug-20	No	Drilling wastes; metal refineries; erosion of natural deposits
Copper [1022] (ppm)			0.0105						
sites exceeding action level	AL = 1.3	1.3	(90 th	0	to	0.0465	Sep-19	No	Corrosion of household plumbing
0			percentile)				1		systems
Fluoride			1						Water additive which promotes
[1025] (ppm)	4	4	0.76	0.63	to	0.63	Aug-20	No	strong teeth
Nitrate									Runoff from fertilizer use; leaching
[1040] (ppm)	10	10	0.405	0.405	to	0.405	Feb-20	No	from septic tanks, sewage; erosion
									of natural deposits
Nitrite									Runoff from fertilizer use; leaching
[1041] (ppm)	1	1	0.200	0.2	to	0.2	Feb-20	No	from septic tanks, sewage; erosion
									of natural deposits
Disinfectants/Disinfec	tion Bypı	oducts and P	recursors						
Total Organic Carbon (ppm)			0.75						
(measured as ppm, but	TT*	N/A	(lowest	1.00	to	1.52	N/A	No *1	Naturally present in environment.
reported as a ratio)			average)	(mo	monthly ratios)				
1*Monthly ratio is the % T	OC remova	l achieved to the	% TOC rem	oval requi	red. A	nnual avera	ge of the mon	thly ratios n	nust be 1.00 or greater for
compliance. PIKEVILLE U	SES AN AI	LTERNATIVE C	OMPLIAN	CE METHO	OD.				
Chlorine	MRDL =		1.28						Water additive used to control
(ppm)	4	MRDLG = 4	(highest	0.25	to	1.9	N/A	No	microbes.
			average)						
HAA (ppb)			20						Byproduct of drinking water
[Haloacetic acids]	60	N/A	(locational	5	to	18	N/A	No	disinfection
(Individual Sites)			average)	(range of	findivi	dual sites)			
TTHM (ppb)			83	16	to	130			Byproduct of drinking water
[Total Trihalomethanes]	80	N/A	(Site				N/A	Yes	disinfection.
(Individual Sites)			max)	(range of system		em sites)		<u> </u>	

Violations and Health Effects for the year of 2020

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER During the calendar year 2020 the City of Pikeville water system had the following violations for water treatment:

Violation	What was the violation	When it happened	What action did we take
TTHM Exceedance	Running Annual Average of TTHM, one site	Ard Dijarter 70170	More flushing in our system, practiced better chlorination control and water age
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What should I do?

There is nothing you need to do at this time. You have received notices for these violations in with your bills during the year.

What is being done?

We have been working to optimize our system to lower the disenfection byproducts. We have practiced better chemical treatment and control of chlorine. We have adjusted tank levels to lower the water age in the system. We have performed more flushing in our system. We have started feeding powered carbon to help remove the compounds that make up trihalomethanes.

For more information, please contact Ralph Varney at 606-262-4230 or by mail at 306 Island Creek Road Pikeville KY 41501 *Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

Health Effects

TTHMs [Total Trihalomethanes]. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.