City of New Castle Water Quality Report 2022

Water System ID: KY0520520 Manager: Jody Bramblett 502-845-5750 CCR Contact: Jody Bramblett 502-845-5750

Mailing Address: 37 East Cross Main Street New Castle, KY 40050 Meeting location and time: City Hall 31 E. Cross Main First Monday each month at 6pm

We buy our water wholesale from Henry County Water District #2. Their source is groundwater from six wells in the Ohio River Alluvial Aquifer. Henry County Water District #2 has completed a Wellhead Protection Plan to determine the susceptibility of their wells to potential contamination. The Wellhead Protection Area has been evaluated and given medium susceptibility status. Moderate risk sites include two septic tanks and one county road. The Wellhead Protection Plan is on file at the Henry County Water District #2 office located at 8955 Main Street in Campbellsburg, Kentucky 40011 (office phone: 502-532-6279). Copies of the plan are also available for review at the Kentuckiana Regional Planning and Development Agency office located at 11520 Commonwealth Drive in Louisville, KY 40299 and from the Kentucky Division of Water office located at 200 Sower Boulevard in Frankfort, Kentucky 40601. Other informational requests may be directed to New Castle City Hall located at 31 East Cross Street in New Castle, Kentucky 40050 or by phone at 502-845-5750.

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, (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.

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.

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.

Regulated Contaminant Test Results from New Castle Water:

Regulated Contaminant	Test Res	ults	New Castle	Water					
Contaminant			Report	Range		Date of		Likely Source of	
[code] (units)	MCL	MCLG	Level	of Detection			Sample	Violation	Contamination
Disinfectants/Disinfection	on Bypro	ducts and Pr	ecursors						
Chlorine	MRDL	MRDLG	0.84						Water additive used to control
(ppm)	= 4	= 4	(highest	0.49	to	1.09	2022	No	microbes.
			average)						
HAA (ppb) (Stage 2)			14						Byproduct of drinking water
[Haloacetic acids]	60	N/A	(high site)	13	to	14	2022	No.	disinfection
(Annual Sample)				(range o	f indiv	vidual sites)			alomitection
TTHM (ppb) (Stage 2)			36						Byproduct of drinking water
[total trihalomethanes]	80	N/A	(high site)	30	to	36	2022	No	disinfection.
(Annual Sample)				(range o	f indiv	vidual sites)			dishirection.
Household Plumbing Con	ntaminan	its							
Copper [1022] (ppm) Round	AL =		0.232						Corrosion of household
sites exceeding action level	1.3	1.3	(90 th	0.085	to	0.404	Jun-21	No	plumbing systems
0			percentile)						Pramonig by ovenib
Lead [1030] (ppb) Round 1	AL =		1						Corrosion of household
sites exceeding action level	15	0	(90 th	0	to	2	Jun-21	No	plumbing systems
0			percentile)						Promoning 5/500mb

Regulated Contaminant Test Results from Henry County Water District #2:

Regulated Contaminant To	est Result	ts	Henry Cour	ıty Water D	istrict #2			
Contaminant	MCI	MCLC	Report		nge	Date of	37 2 - 1 - 42	Likely Source of
[code] (units)	MCL	MCLG	Level	of De	tection	Sample	Violation	Contamination
Inorganic Contaminants	1			1				
Barium [1010] (ppm)	2	2	0.042	0.042 to	0.042	Mar-20	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	0.70	0.7 to	0.7	Mar-20	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	0.38	0.38 to	0.38	Mar-22	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Disinfectants/Disinfection	Byprodu	cts and Precu	rsors				!	•
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	No more	than 1 NTU*						
		.3 NTU in 0.09)	100	No	Soil runoff	
contaminant.	95% of monthly samples		i					

