

## **Eminence Water Works**

KY0520122

Water Quality Report for January 1-December 31, 2020

Manager: Phone:

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CCR Contact:

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Water - Essential for Life

Eminence City Hall

Meetings:

Meeting Dates and Time:

Second (2nd) Monday of each month, at 6:15 PM

Phone: (502) 845-4159

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 get our water from Henry County Water District #2. They obtain their water from six wells along the Ohio River in Trimble County near the end of Morton Ridge Rd. Although the wells are along the Ohio River, the water has been shown to be groundwater originating from areas inland from the river. An analysis of the susceptibility of this water source to contamination has been completed and it has been determined that the susceptibility is medium. There are a total of 5 potential sources of contamination within the protection area of the wells with the following susceptibility rankings: 2 are high, 3 are medium and none are low. Two sources, above-ground storage tanks and agricultural activities are ranked as high susceptibility. Three sources, septic tanks and a county road are ranked as medium susceptibility. The full text of the source water assessment can be viewed at the KIPDA Area

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 is no known or expected risk to health. MCLGs allow for a margin

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.

Level 1 Assessment - A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in

Level 2 Assessment - A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

## Information About Lead:

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.

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.

		E = Eminence Water Works					H = Henry County Water District #2					
Regulated Contaminant T	Test Resu	lts										
Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection		Date of Sample	Violation	Likely Source of Contamination			
Inorganic Contaminants												
Barium [1010] (ppm)	2	2	H =	0.042	0.042	to	0.042	Mar-20	No	Drilling wastes; metal refineries erosion of natural deposits		
Fluoride [1025] (ppm)	4	4	Н=	0.70	0.7	to	0.7	Mar-20	No	Water additive which promotes strong teeth		
Nitrate [1040] (ppm)	10	10	Н=	0.35	0.35	to	0.35	Mar-20	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits		
Disinfectants/Disinfection	Byprodu	icts and Pr	ecur	sors					•			
Chlorine (ppm)	MRDL = 4	MRDLG = 4	E =	0.79 (highest average)	0.44	to	1.07	2020	No	Water additive used to contro microbes.		
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	E =	13 (high site average)	5.3 to 14.4 (range of individual sites)		2020	No	Byproduct of drinking water disinfection			
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	E =	48 (high site average)	35 to 50 (range of individual sites)		2020	No	Byproduct of drinking water disinfection.			
Household Plumbing Con	taminant	ts		8 /	· · ·							
Copper [1022] (ppm) sites exceeding action level = $0$	AL = 1.3	1.3	E =	0.307 (90 <sup>th</sup> percentile)	0.009 to 0.342		Jul-20	No	Corrosion of household plumbing systems			
Lead [1030] (ppb) sites exceeding action level = 0	AL = 15	0	E =	1 (90 <sup>th</sup> percentile)	0	to	10 I lul-20 I No I		Corrosion of household plumbing systems			
Other Constituents												
Turbidity (NTU) TT  * Representative samples	Allowable Levels		Source	Highest Single Measurement			Lowest Monthly %	Violation	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		Н=	0.09		100	No	Soil runoff				

## **Information from Henry County Water District #2:**

Your drinking water has been sampled for a series of unregulated contaminants. Unregulated contaminants are those for which 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.

Unregulated Contaminants (UCMR 4)	Source	Average	R	ange (	ppb)	Date
Manganese	H=	213.305	4.61	to	422	Oct-20
HAA5	H=	10.779	7.84	to	12.94	Oct-20
HAA6Br	H =	12.245	9.87	to	13.899	Oct-20
НАА9	H=	20.683	16.68	to	23.69	Oct-20

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct one Level 1 assessment. One Level 1 assessment was completed. In addition, we were required to take one corrective action and we completed one of these actions.

<sup>\*</sup>This report will not be mailed to you. If you would like a copy please contact our office.