



2025

Water Quality Report

Hardin County Water District No. 2

PWSID: KY0470175

WHERE DOES MY DRINKING WATER COME FROM?

Hardin County Water District No. 2 (HCWD2) provides customers with water sourced from several locations. Our White Mills Water Treatment Plant sources surface water from the Nolin River at Cave Spring in White Mills, while our City Springs Water Treatment Plant sources a combination of surface water and groundwater from the Old City Spring, Gaither Spring (Dyer Spring), and four wells, all of which are located in Elizabethtown. We also receive an additional supply of water through a connection with the Louisville Water Company, which provides us with treated surface water sourced from the Ohio River.



White Mills Water Treatment Plant

HOW IS OUR SOURCE WATER PROTECTED?

In order to protect our source water from contamination, HCWD2 maintains a Source Water Assessment Plan (SWAP) for each treatment plant, that includes an analysis of our source water's susceptibility to contamination. The SWAP for the White Mills Treatment Plant was last updated in 2021 and the SWAP for the City Springs Treatment Plant was updated in 2023. The analysis indicated that the overall susceptibility to contamination is generally moderate, although there are areas that are of high concern. Areas that were recognized to be of high concern consist of bridges, culverts, row crops, and major highways; these areas are of high concern due to the possibility of potential chemical spills, hazardous material accidentally spilling into the water source due to a vehicle accident, or runoff from nearby row crops. Our complete source water assessment plan is available for inspection at our office located at 1951 W Park Rd, Elizabethtown, Kentucky 42701.

WHY ARE THERE REGULATIONS FOR DRINKING WATER?

Both tap water and bottled water come from 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. The water can also pick up and transport substances resulting from the presence of animals or from human activity. These substances are also called contaminants.



To protect public health, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in tap water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 mean that water poses a health risk. More information about contaminants and potential health effects can be



obtained by contacting the Environmental Protection Agency by calling the Safe Drinking Water Hotline (800-426-4791) or visiting the website epa.gov/safewater.

The picture in the top right corner is the Nolin River intake for the White Mills Treatment Plant. The picture in the bottom left corner is City Springs, one of the sources for the City Springs Treatment Plant.

WHAT ARE CONTAMINANTS?

Contaminants are any physical, chemical, biological, or radiological substance or matter in water. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can occur naturally in the soil or groundwater or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants**, which can occur naturally or be the result of oil and gas production and mining activities.

Pictured is the Claricone at the City Springs Treatment Plant. The Claricone is where the majority of the water treatment process occurs. City Springs Treatment Plant has one Claricone and can treat up to 3.3 million gallons of water a day. The White Mills Treatment Plant has three Claricones and can treat up to 8.1 million gallons of water a day.



DEFINITIONS

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Below Detection Levels (BDL): Laboratory analysis indicates that the contaminant is not present.

Contaminant: Any physical, chemical, biological, or radiological substance or matter in water.

Herbicide: Any chemical(s) used to control undesirable vegetation.

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 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 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.

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.

Minimum Reporting Level (MRL): The lowest level of a contaminant in drinking water that is reported to the EPA.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water.

Pesticide: Generally, any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest.

ppb: Parts per billion or micrograms per liter, $\mu\text{g/L}$.

ppm: Parts per million or milligrams per liter, mg/L .

ppt: Parts per trillion or nanograms per liter, ng/L .

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Jan. 1 - Dec. 31, 2025 Water Quality Date for Hardin County Water District No. 2

The data in this report is from January 1 - December 31 of 2025, unless otherwise noted, and is the most recent testing done in accordance with administrative regulation in 401 KAR Chapter 8. As authorized and approved by the 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.

N/A: Not Applicable

REGULATED SUBSTANCES - TREATMENT PLANTS

Substance (units)	MCL	MCLG	White Mills Treatment Plant (WM)		City Treatment	Springs Plant (CS)	Louisville Water Crescent Hill Filter Plant		Compliance Achieved	Likely Source of Contamination
			Highest Level Detected	Range of Detections	Highest Level Detected	Range of Detections	Highest Level Detected	Range of Detections		
INORGANIC										
Barium (ppm)	2	2	0.036	one measure	0.041	one measure	0.021	one measure	YES	Drilling waste, metal refineries, erosion of natural deposits.
Fluoride (ppm)	4	4	0.67	one measure	0.75	one measure	0.62	one measure	YES	Water additive which promotes strong teeth.
Nitrate (ppm)	10	10	2.13	one measure	1.58	one measure	0.96	0.63 - 0.96	YES	Runoff from fertilizer, leaching from septic tanks, erosion of natural deposits.
Nitrite (ppm)	1	1	N/A	N/A	N/A	N/A	0.014	BDL - 0.014	YES	Runoff from fertilizer, leaching from septic tanks, erosion of natural deposits.
Turbidity (NTU)	TT 100% ≤ 1.0 and 95% ≤ 0.3	N/A	0.04	100% ≤ 0.3	0.04	100% ≤ 0.3	0.10	0.04 - 0.10	YES	Soil runoff.
SYNTHETIC ORGANIC										
Atrazine	3	3	0.6	BDL - 0.6	N/A	N/A	N/A	N/A	YES	Runoff from herbicides used on row crops.
ORGANIC										
Total Organic Carbon (Removal Ratio)	TT (≥ 1.00)	N/A	Lowest RAA 2.29	1.43 - 3.59 Monthly Ratios	Lowest RAA 1.12	1.00 - 1.67 Monthly Ratios	Lowest RAA Removal Ratio 1.48	0.86 - 2.02	YES	Naturally present in the environment.

Monthly ratio is the % TOC removal achieved to the % TOC removal required. Compliance with the treatment technique (TT) is based on a running annual average (RAA) of the monthly ratios. A minimum annual average ratio of 1.00 is required.

RADIONUCLIDES

Combined Radium (pCi/L) (measured as Radium-226 & -228)	5	0	N/A	N/A	N/A	N/A	1.21	BDL - 1.21	YES	Erosion of natural deposits.
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REGULATED SUBSTANCES - DISTRIBUTION SYSTEM

Substance (units)	MCL	MCLG	Hardin County Water District No. 2		Louisville Water Company		Compliance Achieved	Likely Source of Contamination
			Average	Range of Detections	Average	Range of Detections		
Chlorite (ppm)	1	0.8	N/A	0	0.20	0.06 - 0.29	YES	By-product of drinking water disinfection.
Chlorine Residual (Chloramines) (ppm)	MRDL = 4	MRDLG = 4	2.64 (Maximum Locational RAA)	0.5 - 4.0	2.69 (RAA)	1.97 - 3.46	YES	Water additive used to control microbes.
Haloacetic Acids (ppb)	60	N/A	28 (Maximum Locational RAA)	13.0 - 31.0	22.4 (Maximum Locational RAA)	4.6 - 27.7	YES	By-product of drinking water disinfection.
Total Trihalomethanes (ppb)	80	N/A	32 (Maximum Locational RAA)	17.0 - 43.0	30.3 (Maximum Locational RAA)	11.6 - 29.6	YES	By-product of drinking water disinfection.

REGULATED SUBSTANCES - AT CUSTOMER'S TAP

Substance (units)	AL	MCLG	# Results Exceeding AL	90th Percentile	Range of Detections	Compliance Achieved	Likely Source of Contamination
Copper (ppm)	AL	1.3	0	0.125	0 - 0.192	YES	Corrosion of household plumbing systems.
	90% ≤ 1.3						
Lead (ppm)	AL	0	1	6	2.0 - 20.0	YES	Corrosion of household plumbing systems.
	90% ≤ 15						

Lead and copper results are from 2024. In accordance with regulation, Hardin County Water District No. 2 samples for lead and copper every three (3) years, from a minimum of thirty (30) taps, to assess corrosion of pipes, plumbing fittings and fixtures. Corrosion of pipes, plumbing fittings, and fixtures may cause metals, including lead and copper, to enter drinking water.

HAS ANY ADDITIONAL TESTING BEEN DONE ON MY WATER?



An HCWD2 employee is inspecting a water meter box.

The Safe Drinking Water Act requires that once every five years EPA issue a list of unregulated contaminants to be monitored by public water systems. The Fifth Unregulated Contaminant Monitoring Rule (UCMR 5), published on December 27, 2021, requires 30 chemical contaminants (29 PFAS and lithium) that are not yet included in EPA drinking water standards to be sampled and analyzed. This monitoring provides the EPA with scientifically valid data on the national occurrence and levels of these contaminants in drinking water, data which will be used to support

future EPA drinking water standards in order to protect public health.

HCWD2 completed all the required monitoring for the UCMR 5. The monitoring results are shown on the next page in the Unregulated Substances Data Table.

WHAT ARE PFAS CHEMICALS?

PFAS (per- and polyfluoroalkyl substances) are a series of man-made chemical compounds that persist in the environment for long periods of time and are often called “forever chemicals.” PFAS chemicals have been used in industry and consumer products, such as nonstick cookware, waterproof clothing, and stain resistant furniture for decades.



An HCWD2 employee is operating a drone to record the bowl of the Downtown Water Tower being lifted into place. The drone is used to detect leaks with thermal imaging.

UNREGULATED SUBSTANCES - ENTRY POINTS

<i>Substance</i>	<i>MRL</i>	White Mills Treatment Plant (WM)		City Springs Treatment Plant (CS)	
		<i>Average</i>	<i>Range of Detections</i>	<i>Average</i>	<i>Range of Detections</i>
PFOA	4 ppt	0 ppt	0 ppt	1 ppt	0 - 4.4 ppt
PFOS	4 ppt	0 ppt	0 ppt	2 ppt	0 - 5.3 ppt
PFNA	4 ppt	0 ppt	0 ppt	2 ppt	0 - 4.7 ppt
PFBA	5 ppt	0 ppt	0 ppt	2 ppt	0 - 5.2 ppt
PFBS	3 ppt	2 ppt	0 - 5.2 ppt	1 ppt	0 - 3.3 ppt
PFHxA	3 ppt	1 ppt	0 - 3.6 ppt	2 ppt	0 - 5.3 ppt
PFPeA	3 ppt	0 ppt	0 ppt	2 ppt	0 - 7.4 ppt
PFNA, & PFBS	1 (Hazard Index)	N/A		0.2 (Hazard Index)	

The **Hazard Index (HI)** is an approach that determines the health concerns associated with mixtures of certain PFAS in finished drinking water. Low levels of multiple PFAS that individually would not likely result in adverse health effects may pose health concerns when combined in a mixture. The Hazard Index MCL represents the maximum level for mixtures of PFHxS, PFNA, HFPO-DA, and/or PFBS allowed in water delivered by a public water system. A Hazard Index greater than 1 requires a system to take action.



Pictured is an HCWD2 equipment operator using an excavator to dig for the installation of a service line.

IMPORTANT HEALTH INFORMATION

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) or on EPA's website epa.gov/safewater.

Two HCWD2 employees are installing a new service line for water service.



LEAD IN DRINKING WATER

HCWD2 has completed a lead service line inventory which shows that there are no lead service lines in the HCWD2 distribution system. The data is available for review and can be accessed online at the link listed below, or in person at 1951 W Park Road, Elizabethtown, KY 42701. HCWD2 is required to test schools and licensed childcare facilities, as requested by the facility. For more information about potential lead sampling results, contact your school or childcare facility.



Use this URL to view HCWD2's lead service line inventory:

<https://tinyurl.com/hcwd2-lsli>

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Hardin County Water District No. 2 is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time.



HCWD2 employees are installing a tracer wire on a new water line. The tracer wire will allow for the water line to easily be located for future repairs.

You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly.

Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>.



An HCWD2 fire hydrant is being repainted by a HCWD2 employee.

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>.

If you are concerned about lead in your water and wish to have your water tested, contact Hardin County Water District No. 2 at (270) 737-1056.

Please share this information with anyone who drinks this water (or their guardians), especially those who may not have received this report directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this report in a public place or distributing copies by hand, mail, email, or another method.

¿HABLA ESPAÑOL?

Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien. (This pamphlet contains important information about your drinking water. Please have this information translated.)

HAVE QUESTIONS OR CONCERNS ABOUT THIS REPORT?

For additional information concerning this report, please contact Ryan Kynett, Water Quality Supervisor at (270) 737-1056 or email rkynett@hcwd2.org.

CONTACT US

1951 W Park Rd
PO Box 970
Elizabethtown, KY 42702
(270) 737-1056
www.hcwd2.org

Monday - Friday
8:30 am to 4:30 pm
Holidays may affect these hours

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Hardin County
Water District No. 2



@hcwd2

Hardin County Water District No. 2 is governed by a Board of Commissioners who meet on the third Tuesday of every month, at the Hardin County Water District No. 2 office, located at 1951 W. Park Road, Elizabethtown, KY 42701.