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.

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

Hardin County Water District #1 Water Quality Report 2025

For previous reports include year.
Example: tapwaterinfo.com/2024/hardinco1

Water System ID: KY0470393 & KY0470990
General Manager: Justin Metz
CCR Contact: Chris Gohman
Phone: 270-351-3222
Mailing address:
1400 Rogersville Road, Radcliff, KY 40160
Meeting location and time:
1400 Rogersville Road
Last Tuesday each month at 11:30 AM

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). 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 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.

Source Information:

Hardin County Water District #1 operates two treatment plants, one at Pirtle Spring and one at Fort Knox. The Pirtle Spring Treatment Plant has two surface water sources. Pirtle Spring, located at the plant site, and the Head of Rough Spring, located about 1.5 miles from the water plant. The watersheds for the springs are in agricultural areas and subject our treatment process to fertilizers, pesticides, and herbicides. The susceptibility to contaminants can be high occasionally due to the karst terrains. The Muldraugh Treatment Plant at Fort Knox treats groundwater from the West Point Wellfield. The susceptibility to contamination is considered moderate, however the close proximity of abandoned oil and gas wells provide a higher susceptibility rating.

Hardin County #1 purchases supplemental water from Hardin County #2 and Louisville Water Company. Hardin County #2 source is White Mills Spring and Louisville is the Ohio River. All of these sources are considered surface water. The overall susceptibility to contamination is considered moderate but a few areas of higher concern include transportation corridors, urban areas, agricultural activities, underground storage tanks, permitted outfalls, abandoned oil and gas wells, and illegal dump sites. Source Water Assessment Plans have been developed for each of these sources and are available for review at the respective water systems.

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).

Information about Lead:

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 water system is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact your local water system. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead.

Service Line Inventory Information:

To address lead in drinking water, EPA requires that all community water systems develop and maintain an inventory of service line materials. A statistical model was used to complete the Service Line Inventory (SLI) and customers may contact our office to request inspection of their service line material.

Lead Sample Results Availability Information:

We are required to periodically sample water from customer taps to determine lead and copper levels. EPA sets the lead action level at 0.015 mg/L (15 ppb). For a water system to be in compliance, at least 90% of tap water samples must have lead levels below this limit. This report contains the 90th percentile and range of our most recent sampling. The individual results for each location sampled can be reviewed at our office.

We are only required to test for some contaminants periodically, so the results listed in this report may not be from the previous year. Only detected contaminants are included in this report. For a list of all contaminants we test for please contact us. Copies of this report are available upon request by contacting our office.

Regulated Contaminant Test Results - Hardin County #1 (HC1); Fort Knox (FK)								
Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Barium [1010] (ppm)	2	2	HC1 FK	0.03 0.026	0.03 to 0.03 0.026 to 0.026	2025 2023	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	HC1 FK	0.55 0.72	0.55 to 0.55 0.72 to 0.72	2025 2023	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	HC1 FK	2.17 0.387	2.17 to 2.17 0.387 to 0.387	2025	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Disinfectants/Disinfection Byproducts and Precursors								
Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	HC1	1.85	1 to 3.81	2025	No	Naturally present in environment.
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.								
Chloramines (ppm)	MRDL = 4	MRDLG = 4	HC1 FK	2.49 2.39	0.6 to 3.3 1.00 to 3.80	2025	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	HC1 FK	23 2	12 to 36 0 to 2	2025	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	HC1 FK	26 8	15 to 37 5 to 8	2025	No	Byproduct of drinking water disinfection.
Household Plumbing Contaminants								
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	HC1 FK	0.117 0.048	0.004 to 0.121 0 to 0.165	2025 2023	No	Corrosion of household plumbing systems
Lead [1030] (ppb) sites exceeding action level 1	AL = 15	0	HC1 FK	3 2	0 to 3 0 to 50	2025 2023	No	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% monthly samples		HC1 FK	0.084 0.067	100	No	Soil runoff	

Violation 2026-9598035

We collect chlorine samples daily from the distribution system and include those results in our Monthly Operating Report (MOR). The samples we collected in the Northern portion of our system on October 5&6, 2025 were below the required total chlorine residual of 0.5 mg/L. We have established procedures to maintain required minimum chlorine levels.

Regulated Contaminant Test Results - Hardin Co #2 White Mills Plant (WM); Louisville Water Co. (LWC)								
Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Combined radium (pCi/L)	5	0	LWC	BDL	BDL to 1.21	2025	No	Erosion of natural deposits
Barium [1010] (ppm)	2	2	WM LWC	0.036 0.021	0.036 to 0.036 0.021 to 0.021	2025	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	WM LWC	0.67 0.62	0.67 to 0.67 0.62 to 0.62	2025	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	WM LWC	2.13 0.96	2.13 to 2.13 0.63 to 0.96	2025	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite [1041] (ppm)	1	1	LWC	0.014	0 to 0.014	2025	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Atrazine [2050] (ppb)	3	3	WM	0.6	0.6 to 0.6	2025	No	Runoff from herbicide used on row crops
Disinfectants/Disinfection Byproducts and Precursors								
Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	WM LWC	2.29 1.48	1.43 to 3.59 0.86 to 2.02	2025	No	Naturally present in environment.
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.								
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% monthly samples		WM LWC	0.041 0.1	100	No	Soil runoff	

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 action.

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.