Hardin County Water District No. 2

Annual Water Quality Report for 2020

What is a water quality report?

The report is information regarding the contaminants the District tests and monitors for in your water. The District is making this information available so, you the consumer, may have a better understanding of the measures we take to ensure that your water is safe. The District conducts routine water sampling and monitoring, along with an ongoing flushing program to maintain quality water. The District conducts thousands of analyses each year to ensure that we not only meet state and federal standards, but exceed them in all areas of water quality. Detailed information regarding detected contaminants is located within this publication. For a paper copy, please call 270-737-1056.

Este informe contiene informacion muy importante. Traduzcalo o hable con alguien que lo entienda bien. (Translated: This report contains very important information. Translate or ask someone who understands it very well.)

Your Personal Source: The Nolin River

Hardin County Water District No. 2 has realized the susceptibility of contamination for the sources and has developed Source Water Action Plans (SWAP), which include an analysis of susceptibility of water supply to contamination. The plans have been approved by the DOW and are available for inspection at Hardin County Water District No. 2's Customer Service Center located at 360 Ring Road.

Areas recognized as high concern consist of bridges, culverts, row crops, and major highways. The possibility for a potential chemical spill, or hazardous material accidentally spilling into the water source due to a vehicle accident or runoff from nearby row crops, creates a susceptibility ranking of high.

Although there are areas of high concern, the susceptibility analysis indicates that the overall susceptibility to contamination is generally moderate.

For more information about the Source Water Action Plan or how you can help to protect our water supply, contact our office at (270) 737-1056.

Water is supplied to your home through a network of pipes that originate from one or a combination of two water treatment plants; White Mills and City Springs. The source of water for the City Springs plant is a combination of surface and groundwater from the Old City Spring, Gaither Spring (Dyer Spring), and four wells, all located in Elizabethtown. The White Mills plant utilizes surface water from the Nolin River at White Mills.

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, which must provide that same protection for public health.

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 can pick up substances resulting from the presence of animals or from human activity.

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 can be obtained by calling the environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

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 be naturally occurring or 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 be naturally occurring or be the result of oil and gas production and mining activities.

Do I need to take special precautions?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791). For more information about your drinking water please call our Customer Service Department at (270) 737-1056.

Definitions

MCL - Maximum Contaminant Level: 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.

MCLG - Maximum Contaminant Level Goal: 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.

MRDL - Maximum Residual Disinfection Level: the highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG - Maximum Residual Disinfectant Level Goal: 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 disinfectant to control microbial contaminants.

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

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

Picouries per liter (pCi/L) - a measure of the radioactivity in water.

BDL - Below Detection Levels. Laboratory analysis indicates that the contaminant is not present.

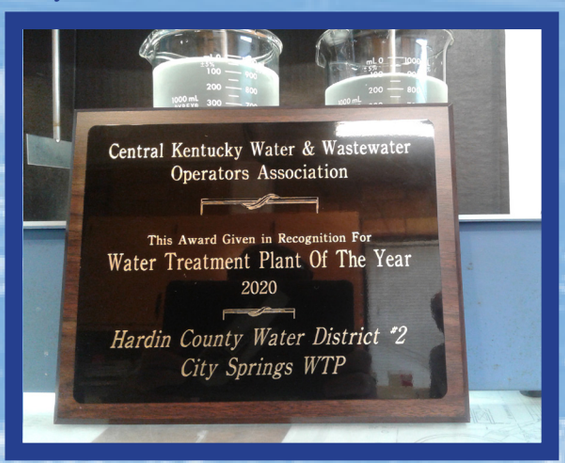
PPM - Parts Per Million

PPB - Parts Per Billion

NTU - Nephelometric Turbidity Unit

RAA - Running annual average

LRAA - Locational running annual average



The data in this report, unless otherwise noted, is from January 1 - December 31 of 2020 and is the most recent testing done in accordance with administrative regulation 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.

REGULATED SUBSTANCES - TREATMENT PLANTS

WHITE MILLS TREATMENT PLANT

Substances (units)	MCL	MCLG	Range of Detections	Highest Level Detected	Compliance Achieved	Likely source of contamination
INORGANIC						
Barium (ppm)	2	2	one measure	0.031	YES	Drilling waste, metal refineries, erosion of natural deposits.
Fluoride (ppm)	4	4	one measure	0.78	YES	Water additive which promotes strong teeth.
Nitrate (ppm)	10	10	one measure	1.86	YES	Runoff from fertilizer use, leaching from septic tanks, erosion of natural deposits.
Nitrite (ppm)	1	1	one measure	0.2	YES	Runoff from fertilizer use, leaching from septic tanks, erosion of natural deposits.
Turbidity (NTU)	TT 100% ≤ 1.0 and 95% ≤ 0.3	n/a	100% ≤ 0.3	0.022	YES	Soil runoff
SYNTHETIC ORGANIC						
Atrazine (ppb)	3	3	BDL - 0.33	0.33	YES	Runoff from herbicides used on row crops.
ORGANIC						
Total Organic Carbon (Removal Ratio)	TT(≥ 1.00)	n/a	1.00 - 4.32 Monthly Ratios	Lowest RAA 2.20	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 ration of 1.00 is required.

CITY SPRINGS TREATMENT PLANT

Substances (units)	MCL	MCLG	Range of Detections	Highest Level Detected	Compliance Achieved	Likely source of contamination
INORGANIC						
Fluoride (ppm)	4	4	one measure	0.55	YES	Water additive which promotes strong teeth.
Barium (ppm)	2	2	one measure	0.036	YES	Drilling waste, metal refineries, erosion of natural deposits.
Nitrate (ppm)	10	10	one measure	1.3	YES	Runoff from fertilizer use, leaching from septic tanks, erosion of natural deposits.
Nitrite (ppm)	1	1	one measure	0.2	YES	Runoff from fertilizer use, leaching from septic tanks, erosion of natural deposits.
Turbidity (NTU)	TT 100% ≤ 1.0 and 95% ≤ 0.3	n/a	100% ≤ 0.3	0.042	YES	Soil runoff
ORGANIC						
Total Organic Carbon (Removal Ratio)	TT(≥ 1.00)	n/a	1.0 - 1.67 Monthly Ratios	Lowest RAA 1.26	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 ration of 1.00 is required.

LOUISVILLE WATER CRESCENT HILL FILTER PLANT

Substances (units)	MCL	MCLG	Range of Detections	Highest Level Detected	Compliance Achieved	Likely source of contamination
INORGANIC						
Fluoride (ppm)	4	4	one measure	0.6	YES	Water additive which promotes strong teeth.
Nitrate (ppm)	10	10	0.8-1.0	1	YES	Runoff from fertilizer use, leaching from septic tanks, erosion of natural deposits.
Turbidity (NTU)	TT 100% ≤ 1.0 *and* 95% ≤ 0.3	n/a	0.03 - 0.07	0.07 100% ≤ 0.3	YES	Soil runoff
ORGANIC						
Total Organic Carbon (Removal Ratio)	TT(≥ 1.00)	n/a	0.92-1.97	Lowest RAA Removal Ratio 1.34	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 ration of 1.00 is required.

UNREGULATED SUBSTANCES - HARDIN COUNTY WATER DISTRICT #2

WHITE MILLS TREATMENT PLANT

Substance (units)	Minimum Reporting Level	Average	Range of Detections
UNTREATED SOURCE WATER			
Total Organic Carbon (ppm)	0.5	1	1.0-1.0

CITY SPRINGS TREATMENT PLANT

Substance (units)	Minimum Reporting Level	Average	Range of Detections
UNTREATED SOURCE WATER			
Total Organic Carbon (ppm)	0.5	0.9	0.9-0.9

Louisville Water Connection

Substance (units)	Minimum Reporting Level	Average	Range of Detections
Manganese (ppb)	N/A	1.78	1.78-1.78

DISTRIBUTION SYSTEM

HAA5 (ppb)	N/A	16.088	10.4-19.9
HAA6Br (ppb)	N/A	3.4175	2.65-5.65
HAA9 (ppb)	N/A	19.5	15.9-23.7

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants 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, or email Ryan Kynett at rkynett@hcwd2.org

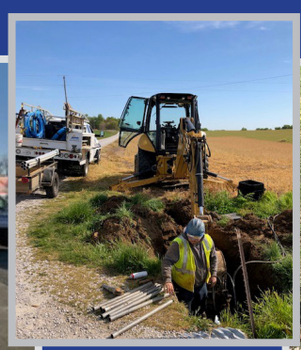
REGULATED SUBSTANCES - AT CUSTOMERS TAP

Substances (units)	AL	MCLG	Range of	90th	Compliance	Likely source of contamination
Copper (ppm)						
0 samples exceeded AL	AL 90% ≤ 1.3	1.3	0.001 - 0.175	0.068	YES	Corrosion of household plumbing systems
Lead (ppb)						
1 samples exceeded AL	AL 90% ≤ 15	0	0 - 8	4	YES	Corrosion of household plumbing systems

Lead and copper results are from 2018 and the most recent required testing done in accordance with the regulation.

REGULATED SUBSTANCES - DISTRIBUTION SYSTEM

			Hardin County Water District No. 2		Louisville Water Company			
Substances (units)	MCL	MCLG	Range of Detections	Highest Level Detected	Range of Detections	Highest Level Detected	Compliance Achieved	Likely source of contamination
Total Trihalomethanes (ppb) (Stage 2 DBPR)	80	n/a	16.0 - 39.0	36 (LRAA)	10.5 - 37.7	28.8 (LRAA)	YES	Byproduct of drinking water disinfection
Haloacetic Acids (ppb) (Stage 2 DBPR)	60	n/a	9.0 - 43.0	40 (LRAA)	2.5 - 31.6	22.6 (LRAA)	YES	Byproduct of drinking water disinfection
Chloramines (ppm)	MRDL = 4	MRDLG=4	1.7 - 3.20	2.35 (RAA)	1.44 - 3.37	2.64 (RAA)	YES	Water additives used to control microbes



HCWD#2 Distribution System was recognized by the KY Division of Water for meeting the goals of the AWOP for Disinfection By Products.

The District Board of Commissioners meet on the third Tuesday of each month at 4:00 pm. The meetings are held at our Customer Service Center located at 360 Ring Road. Please feel free to participate in these meetings.

360 Ring Road
Elizabethtown, KY 42701
270-737-1056
www.hcwd2.org

White Mills Treatment Facility was recognized by the KY Division of Water for receiving AWOP recognition for 10 consecutive years!