



Water Quality Report information and water quality analyses. An in-depth look at how the District is protecting its customers.  
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Five ways to lower your water usage and save money in the process.  
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Growing: Moving toward the future. The District's activity meter is registering High! **PAGE 8**

# Hardin County Water District No. 2

*Your Water Professionals*

# THE Water Resource

## 2015

**PWSID #  
0470175**

## The Value of Water: What is the value of your water?

It's much more than the amount we pay to have clean, safe, reliable water delivered to our homes.

Essential. Reliable. Invaluable. Water—it's the thread that weaves together our daily lives. It keeps our communities healthy, our cities running, and our economies growing. Water is a cup of coffee, the produce aisle, better production, increased exports, and greater American strength. While essential, water infrastructure is largely invisible. Few people realize what it takes to treat and deliver drinking water every day or how wastewater is cleaned so that it can be safely reused or returned to the environment. The high quality of life we enjoy in America would not be possible without water and the infrastructure that fuels it. Hardin County Water District No. 2, Your Water Professionals, are committed to providing safe, reliable water service to our customers and to people around the world.



### WATER QUALITY REPORT

What is a water quality report? The report is information regarding the contaminants the District tests and monitors 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 the quality of your water. A more detailed explanation and analyses results are located on page 2. Should you have any additional questions, please feel free to contact us at (270) 737-1056 or by emailing us at: [mailbox@hardincountywater2.org](mailto:mailbox@hardincountywater2.org).

# WATER QUALITY REPORT

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## Water and You

Water is life. It nourishes us. It cleans us and sustains us. Put simply, water is you.

- The average American uses 176 gallons of water per day—that's 64,240 gallons a year!
- 40% of water in America is used to produce the food we eat and the beverages we drink.
- If drinking water and soda pop cost equally, your water bill would skyrocket more than 10,000%.

## Water and the Economy

Water is the lifeblood of our economy. We rely on it for manufacturing, energy production, to transport materials across the globe, and more.

- One-fifth of the US economy would grind to a halt without a reliable and clean source of water.
- 1 to 3.68—the water jobs multiplier. Every job we create in the water sector helps add another 3.68 jobs in the national economy.
- 1 to 6—every \$1 spent on infrastructure improvements in the US generates \$6 in returns.

**95% of Americans believe that water is the most important service they receive, ahead of electricity, heat, the internet and cell phone service**

Source: [Valueofwater.org](http://Valueofwater.org)

## What is the source of my water?

Water is supplied to your home through a network of pipes that originate from one or a combination of three water treatment plants; White Mills, City Springs, and Freeman Lake treatment plants. 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 while the White Mills and Freeman Lake plants utilize surface water from the Nolin River and Freeman Lake Reservoir respectively. Hardin County Water District No. 2 has realized the susceptibility of contamination of the sources and has developed Source Water Action Plans (SWAP), which include an analysis of susceptibility of the water supply to contamination. The plans have been approved by the Division of Water and are available for inspection at Hardin County Water District No. 2's Customer Service Center located at 360 Ring Road in Elizabethtown.

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 the 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.

## Why are there contaminants in my water?

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). To understand the possible health effects described for many of the regulated constituents, a person would have to drink 2 liters of water everyday for a life time at the MCL (Maximum Contaminant Level) to have a one in a million chance of having the described health effects.

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.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, that 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.

**Is our water system meeting other rules that govern our operations?**

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.

**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.

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.)

**How can I get involved?**

The District Board of Commissioners meet on the third Tuesday of each month. The meeting start times from April-October are 5:00 pm, from November-March the meetings start at 4:00 pm. The meeting are held at our Customer Service Center located at 360 Ring Road. Please feel free to participate in these meetings.



*Do you have more questions?*

**Please contact Scott Clark, Administrative Manager at 270.737.1056 or e-mail your question to [sclark@hardincountywater2.org](mailto:sclark@hardincountywater2.org)**



# EASY PAY & e-Billing

**Have your water bill drafted from your bank account, it saves, it's easy, & it's FREE!**

EASY PAY (bank draft):  e-Bill:

I (we) hereby authorize Hardin County Water District #2 to initiate debit entries to my (our) account indicated below at the depository named below to debit the same to such account.

Name \_\_\_\_\_

District Acct. # \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_

\*Checking Acct. # \_\_\_\_\_

Routing # \_\_\_\_\_

Email \_\_\_\_\_

Signature \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

\*Note: Please enclose a voided check or copy of a check for our records. Please verify your checking account number with your bank. When calling your bank let them know you are signing up for Bank Drafts, because some banks will add or subtract numbers on your account for automated drafts. This will insure proper payment.



# WATER QUALITY ANALYSES

The data in this report, unless otherwise noted, is from 2014 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
<b>INORGANIC</b>						
Fluoride (ppm)	4	4	one measure	0.7	YES	Water additive which promotes strong teeth.
Barium (ppm)	2	2	one measure	0.035	YES	Drilling waste, metal refineries, erosion of natural deposits.
Nitrate (ppm)	10	10	one measure	2.6	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	0.045	YES	Soil runoff

### ORGANIC

Total Organic Carbon (Removal Ratio)	TT(≥ 1.00)	n/a	0.40 - 3.03 Monthly Ratios	Lowest RAA	1.55	YES	Naturally present in the environment.
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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 - Data collected prior to HCWD#2 acquisition of Elizabethtown Water is included.

Substances (units)	MCL	MCLG	Range of Detections	Highest Level Detected	Compliance Achieved	Likely source of contamination
<b>INORGANIC</b>						
Fluoride (ppm)	4	4	one measure	1.1	YES	Water additive which promotes strong teeth.
Barium (ppm)	2	2	one measure	0.085	YES	Drilling waste, metal refineries, erosion of natural deposits.
Nitrate (ppm)	10	10	one measure	0.94	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	0.058	YES	Soil runoff

### ORGANIC

Total Organic Carbon (Removal Ratio)	TT(≥ 1.00)	n/a	1.0 - 22.89 Monthly Ratios	Lowest RAA	1.30	YES	Naturally present in the environment.
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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.



**Hardin County Water District No. 2 invites you to join our Facebook page. Now your first impression may be "A water utility with a Facebook page?". We created our page to highlight the projects, news stories and employee activities that go on throughout the year. We hope you will take a moment to check out Your Water Professionals at work and our involvement in the community!**

# WATER QUALITY ANALYSES-CONTINUED

## REGULATED SUBSTANCES - TREATMENT PLANTS (Continued)

**FREEMAN LAKE TREATMENT PLANT** - Data collected prior to HCWD#2 acquisition of Elizabethtown Water is included

Substances (units)	MCL	MCLG	Range of Detections	Highest Level Detected	Compliance Achieved	Likely source of contamination
<b>INORGANIC</b>						
Fluoride (ppm)	4	4	one measure	1	YES	Water additive which promotes strong teeth.
Barium (ppm)	2	2	one measure	0.081	YES	Drilling waste, metal refineries, erosion of natural deposits.
Nitrate (ppm)	10	10	0.53 - 0.61	0.61	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	0.046	YES	Soil runoff

## ORGANIC

Total Organic Carbon (Removal Ratio)	TT(≥ 1.00)	n/a	1.28 - 3.56 Monthly Ratios	Lowest RAA	1.73	YES	Naturally present in the environment.
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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.

## SYNTHETIC ORGANIC

Substances (units)	MCL	MCLG	Range of Detections	Highest Level Detected	Compliance Achieved	Likely source of contamination
Atrazine (ppb)	3	3	one measure	0.59	YES	Runoff from herbicide used on row crops

## REGULATED SUBSTANCES - DISTRIBUTION SYSTEM

Substances (units)	MCL	MCLG	Range of Detections	Highest Level Detected	Compliance Achieved	Likely source of contamination
Total Trihalomethanes (ppb) (Stage 2 DBPR)	80	n/a	23 - 99	61 (LRAA)	YES	Byproduct of drinking water disinfection
Haloacetic Acids (ppb) (Stage 2 DBPR)	60	n/a	27 - 73	58 (LRAA)	YES	Byproduct of drinking water disinfection
Chlorine (ppm)	MRDL = 4	MRDLG=4	0.25 - 2.5	1.63 (RAA)	YES	Water additives used to control microbes

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.

## REGULATED SUBSTANCES - AT CUSTOMERS TAP

Substances (units)	AL	MCLG	Range of Detections	90th Percentile	Compliance Achieved	Likely source of contamination
Copper (ppm) 0 samples exceeded AL	AL 90% ≤ 1.3	1.3	0.004 - 0.348	0.213	YES	Corrosion of household plumbing systems
Lead (ppm) 0 samples exceeded AL	AL 90% ≤ 15	0	2 - 8.2	3.8	YES	Corrosion of household plumbing systems

Lead and copper results are from 2012 and the most recent required testing done in accordance with the regulation.

**Sign-up for  
Paperless Billing  
and Get a \$5 Credit!**



The enrollment form is located on page 3 or go online and complete the form!

# WATER QUALITY ANALYSES-CONTINUED

The following data was collected by the City of Elizabethtown between January 1, 2014 and October 31, 2014 prior to the HCWD#2 acquisition of the Elizabethtown Water system.

## REGULATED SUBSTANCES - DISTRIBUTION SYSTEM

Substances (units)	MCL	MCLG	Range of Detections	Highest Level Detected	Compliance Achieved	Likely source of contamination
Total Trihalomethanes (ppb) (Stage 2 DBPR)	80	n/a	18 - 89	52 (LRAA)	YES	Byproduct of drinking water disinfection
Haloacetic Acids (ppb) (Stage 2 DBPR)	60	n/a	8.9 - 44	35 (LRAA)	YES	Byproduct of drinking water disinfection
Chlorine (ppm)	MRDL = 4	MRDLG=4	0.41 - 2.12	1.62 (RAA)	YES	Water additives used to control microbes
Total Coliform Bacteria (% positive)	≤ 5% positive samples/month	0	n/a	5%	YES	Naturally present in the environment

The following lead and copper results are from 2012 and the most recent required testing done in accordance with the regulation. The data was collected by the City of Elizabethtown prior to the HCWD#2 acquisition of the Elizabethtown Water system.

## REGULATED SUBSTANCES - AT CUSTOMERS TAP

Substances (units)	AL	MCLG	Range of Detections	90th Percentile	Compliance Achieved	Likely source of contamination
Copper (ppm) 0 samples exceeded AL	AL 90% ≤ 1.3	1.3	0 - 0.33	0.18	YES	Corrosion of household plumbing systems
Lead (ppm) 1 sample exceeded AL	AL 90% ≤ 15	0	0 - 44	8.1	YES	Corrosion of household plumbing systems

## UNREGULATED SUBSTANCES - UCMR3

The following data was collected by HCWD#2 in 2014.

Substances	Average (ppb)	Range of Detections (ppb)
Chromium	0.35	0.3 - 0.4
Strontium	165	150 - 180
Vanadium	0.2	0.2 - 0.2
Chromium, Hexavalent	0.31	0.25 - 0.37

The following data was collected by the City of Elizabethtown in 2014 prior to the HCWD#2 acquisition of the Elizabethtown Water system.

Substances	Average (ppb)	Range of Detections (ppb)
Chromium	0.32	0.3 - 0.4
Strontium	1049	180 - 2200
Vanadium	0.25	0.2 - 0.3
Chromium, Hexavalent	0.25	0.06 - 0.42

EPA has required monitoring of specific unregulated contaminants in an effort to collect data that will serve as a primary source of occurrence and exposure information that the agency uses to develop regulatory decisions. EPA has not established drinking water standards for unregulated contaminants. There are no MCL's and therefore no violations if any levels are found. For a complete report of the results, please call 270-737-1056 or email request to [mailbox@hardincountywater2.org](mailto:mailbox@hardincountywater2.org)

## Your Water Professionals

# 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.

**PPM – Parts Per Million**

**PPB – Parts Per Billion**

**NTU – Nephelometric Turbidity Unit**

**RAA – Running annual average**

**LRAA – Locational running annual average**

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. Hardin County Water District No. 2 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>.

## Measuring Up: UNDERSTANDING TEST RANGES

**Did you ever wonder what all that parts per million and parts per billion really mean. Well we have listed some comparisons below to help you put it all in perspective.**

Parts Per Million - One minute in two years.

Parts Per Billion - One penny in \$10,000,000

Parts Per Trillion - One minute in 2,000 years

Parts Per Quadrillion - One penny in \$10,000,000,000,000

**We strive to provide the safest and best quality water to all of our customers, even if it means looking for the proverbial needle in the haystack.**

## Be Water Aware: PROTECTING YOUR WATER

We need you. The Water Watch Program is designed to protect your water and the well being of your family and friends. We are asking all of our customers to be more alert and aware of suspicious activity around fire hydrants, meter boxes and any other District property. Malicious acts, pranks, and theft of service are common occurrences in the water industry and are very costly. When people steal water service they are stealing from you. When people damage District property they potentially damage your water supply. Fire hydrant misuse is a large problem. Hydrants are only to be used for flushing, fighting fires, and on rare occasions, for temporary service. Should you need water for crops, filling a swimming pool, or any other activity, make sure the water is obtained from one of the water loading stations located in the county or another legal source. Stealing water is a crime. So, the next time you see someone using a hydrant and you are not sure why, give us a call at (270) 737-1056.



**Hardin County  
Water District No. 2**

P.O. Box 970/360 Ring Road  
Elizabethtown, KY 42701

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Inside  
this issue:

Water  
Quality  
Report

### **Growing: MOVING TOWARD THE FUTURE**

Hardin County Water District No. 2 has \$23,000,000 worth of projects that are currently under construction or are on tap to begin in the near future. That means our activity meter is registering High! Some of these projects include, our connection with the Louisville Water Company, upgrades at our water plants, and the complete overhaul of the newly acquired City meter connections. These investments and efforts are to insure that Hardin County Water District No. 2 is providing the best water quality and service to you our customer. To stay up to date on all of our projects, check with us via mailings and bill inserts, our web-page and social media.



**Visit us online at: [www.hardincountywater2.org](http://www.hardincountywater2.org)**

