



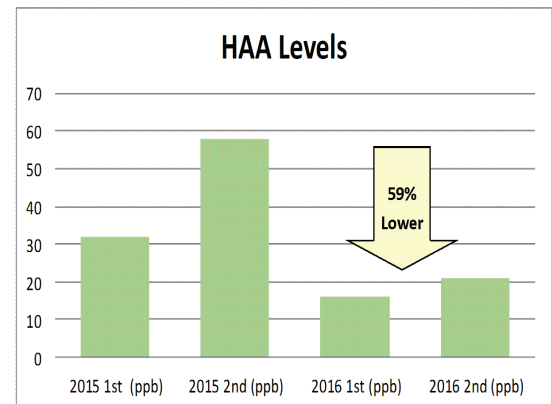
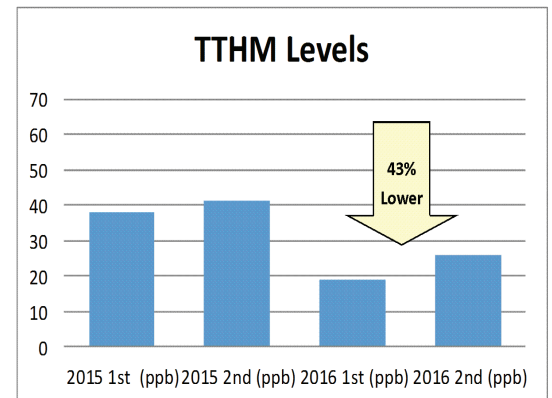
Hardin County Water District No. 2

THE WATER RESOURCE

Raising the Bar on Water Quality.

Hardin County Water District No. 2's (HCWD#2) decision to change its method of disinfection has already proven to be effective in the improvement of water quality. In December of 2015, HCWD#2 changed its secondary method of disinfection from chlorine to chloramines and the benefits of this change were immediately realized. Lab analysis conducted in the month following the change have indicated significantly lower levels of disinfection by-products (DBP's). DBP's are chemicals which are formed when chlorine or chloramines react with organic and inorganic substances that are naturally present in water during the normal water treatment process. The Environmental Protection Agency regulates DBP's and has established limits on the amount that may be present in drinking water, specifically total trihalomethanes (TTHM) and five separate haloacetic acids (HAA5). Until recently, compliance was determined for both TTHM's and HAA5's by averaging

the results obtained from all sites sampled. However, recent regulatory changes now require compliance to be determined by averaging results from individual sites which increase the potential to exceed the limits set by EPA. Prior to the regulatory changes, HCWD#2 recognized the potential to exceed the EPA limits and therefore began considering different treatment options. An in-depth study was conducted which indicated a reduction in DBP's by 50% or more when chloramines were used as a disinfectant (see Figure 1). Based on these results, along with other factors, the decision was made to change the disinfectant process. As previously indicated, the first round of testing conducted after the conversion to chloramines demonstrated lower levels of DBP's which coincides with the results obtained from the previous study. Significant reduction of both TTHM's and HAA5's were realized from the new disinfection process. It is HCWD#2's assumption the future testing will continue to provide similar results obtained from the study and therefore it is likely the future DBP levels will remain well below the limits set by EPA.



The two graphs illustrate the lower levels, the two columns on the right, compared to last year's results, the two columns on the left.

INSIDE THIS ISSUE

- P2**
Water Quality Report
- P4**
Water Analyses Results
- P4**
Project News
- P7**
Drink Responsibly

WHAT IS A WATER QUALITY REPORT?

The Water Quality Report contains 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 continuously exceed them in the quality of your water. A more detailed explanation and the analyses results are located on page 4. Should you have any additional questions, please feel free to contact us at (270) 737-1056 or by emailing us at: mailbox@hardincountywater2.org.



SHUT IT OFF BEFORE YOU SHOVE OFF!

When you leave your home for an extended period of time, like an overnight trip or vacation, make sure you shut off the main valve in your house. If you don't have a main valve, shut off the water to your washing machine and toilets. No one wants a flooded house when they return from a trip.



WATER QUAL

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.

QUALITY REPORT 2015

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 información muy importante. Tradúzcalo 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's Board of Commissioners meets on the third Tuesday of each month at 4:00 p.m. at our Customer Service Center located at 360 Ring Road. Please feel free to participate in these meetings.



ANALYSES RESULTS

The data in this report, unless otherwise noted, is from 2015 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						
Fluoride (ppm)	4	4	one measure	0.7	YES	Water additive which promotes strong teeth.
Barium (ppm)	2	2	one measure	0.055	YES	Drilling waste, metal refineries, erosion of natural deposits.
Nitrate (ppm)	10	10	one measure	2.5	YES	Runoff from fertilizer use, leaching from septic tanks, erosion of natural deposits.
Selenium (ppb)	50	50	one measure	1.7	YES	Discharge from petroleum and metal refineries or mines, erosion of natural deposits.
Turbidity (NTU)	TT 100% ≤ 1.0 and 95% ≤ 0.3	n/a	100% ≤ 0.3	0.04	YES	Soil runoff

ORGANIC

Total Organic Carbon (Removal Ratio)	TT(≥ 1.00)	n/a	1.43 - 3.87 Monthly Ratios	Lowest RAA	1.66	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	0.5	YES	Water additive which promotes strong teeth.
Barium (ppm)	2	2	one measure	0.046	YES	Drilling waste, metal refineries, erosion of natural deposits.
Nitrate (ppm)	10	10	one measure	1.2	YES	Runoff from fertilizer use, leaching from septic tanks, erosion of natural deposits.
Selenium (ppb)	50	50	one measure	1.7	YES	Discharge from petroleum and metal refineries or mines, erosion of natural deposits.
Turbidity (NTU)	TT 100% ≤ 1.0 and 95% ≤ 0.3	n/a	100% ≤ 0.3	0.048	YES	Soil runoff

ORGANIC

Total Organic Carbon (Removal Ratio)	TT(≥ 1.00)	n/a	1.0 - 3.7 Monthly Ratios	Lowest RAA	1.67	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.

ANALYSES RESULTS

REGULATED SUBSTANCES - TREATMENT PLANTS (Continued)

FREEMAN LAKE 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	0.5	YES	Water additive which promotes strong teeth.
Barium (ppm)	2	2	one measure	0.045	YES	Drilling waste, metal refineries, erosion of natural deposits.
Nitrate (ppm)	10	10	one measure	0.6	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	0.046	YES	Soil runoff

ORGANIC

Total Organic Carbon (Removal Ratio)	TT(≥ 1.00)	n/a	1.33 - 3.10 Monthly Ratios	Lowest RAA 2.03	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.

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	32 - 99	68 (LRAA)	YES	Byproduct of drinking water disinfection
Haloacetic Acids (ppb) (Stage 2 DBPR)	60	n/a	26 - 89	62 (LRAA)	NO**	Byproduct of drinking water disinfection
Chloramines (ppm)	MRDL = 4	MRDLG=4	0.90 - 3.13	1.87 (RAA)	YES	Water additives used to control microbes
Chlorine (ppm)	MRDL = 4	MRDLG=4	0.44 - 2.90	1.65 (RAA)	YES	Water additives used to control microbes
Total Coliform Bacteria (% positive)	5%	0	N/A	2.33%	YES	Naturally present in the environment

*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.

**As indicated above, testing results from October 2015 show that our system exceeded the maximum contaminant level for haloacetic acids at one location for the fourth quarter of 2015. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. HCWD#2 changed its disinfection process on Dec. 1, 2015 which resulted in a significant reduction in haloacetic acids thereby reducing the average results below the MCL.

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	0.0105 - 0.271	0.126	YES	Corrosion of household plumbing systems
Lead (ppm) 1 samples exceeded AL	AL 90% ≤ 15	0	2 - 27	8	YES	Corrosion of household plumbing systems

Lead and copper results are from 2015 and the most recent required testing done in accordance with the regulation.



Hardin County Water District No. 2 invites you to join our 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!

ANALYSES RESULTS

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

CRYPTOSPORIDIUM

In 2015, Hardin County Water District No. 2 monitored for the presence of cryptosporidium in the source water for both City Springs and White Mills Treatment plants. The results indicated low levels of cryptosporidium in 2 samples out of 3 collected at City Springs and in 1 sample out of 3 collected at White Mills. Cryptosporidium is a tiny intestinal parasite often found in surface waters which can cause flu-like symptoms if ingested. Hardin County Water District No. 2 optimizes the treatment process at both treatment plants to help ensure removal.

DRINK RESPONSIBLY, DRINK TAP WATER INSTEAD!

We have all heard that drinking 8 to 10 glasses of water is good for you, but many of us don't know the full extent of water's benefits. Here are 10 ways water helps you look younger and feel more energized:

1. Reduces daytime fatigue
2. Improves memory
3. Nourishes skin
4. Essential for digestion and nutrient absorption
5. Helps remove toxins from the body
6. Aids in circulation
7. Regulates your body's cooling system

8. May help reduce kidney stones and urinary tract infections
9. Improves muscle tone
10. Helps lubricate joints

We know that many folks choose to drink bottled water, some for the convenience of the bottle and some for the misconception that bottled water is better. There have been many proven studies by independent groups to show that tap water is as good or if not better than bottled water. The enormous value of water should also be considered. For the average price of

one 20 oz. bottle of water a District customer can enjoy 242 GALLONS of Kentucky's best tasting water! Drink tap water and enjoy all the benefits.



Your Water Professionals

**EASY
PAY**



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 No. 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.

**Do you have more questions?
Please contact Scott Clark,
Customer Service Manager
at 270.737.1056 or e-mail
your questions to
sclark@hardincountywater2.org**

PROJECT NEWS GROWING OPPORTUNITIES.

As our community grows, so must the infrastructure that supports it. The District continues to expand and upgrade our system to insure we continue to provide clean, safe water today and beyond.

The District has started construction of an alternate water source from the Louisville Water Company. This additional water will provide a backup in case of emergencies and also help meet demand during the dry summer months. The project consist of a 5 million gallon a day (MGD) pumping station located near the Hardin and Bullitt County line and 9 miles of 24" ductile iron water main. This pipeline will interconnect with the District's existing 24" Loop Line that encircles are biggest customer density. The

need for wastewater in our area is great. The engineering and design stages of the Nolin Wastewater project are completed. The District will be submitting the project to the Public Service Commission in the near future for their approval. This will be the District's first wastewater project, however we do not expect this to be the last. All of these and more projects are part of the District's 20 year Capital Improvement Plan that will ensure the District's customers have safe, reliable drinking water and other services now and into the future. For up to date information regarding this and all the other projects, just visit our website at www.hardincountywater2.org and click on the News tab. Your water professionals, growing to meet our communities needs.

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 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.



**Hardin County
Water District No. 2**
P.O. Box 970/360 Ring Road
Elizabethtown, KY 42701



**GO GREEN
GET PAID,
DETAILS INSIDE.**

Presorted Standard
U.S. POSTAGE PAID



**NEED A HYDRANT?
CONTACT US ABOUT
OUR HYDRANT
PROGRAM.**

PAYMENT OPTIONS TO MEET YOUR NEEDS.

Easy Pay

Easy Pay is offered as a free service that allows your water bill to be drafted from your checking or savings account. Don't you need one less thing to think about? It's Fast, It's Easy, and It's Free!

Web Pay

Do you like making your payments online? Web Pay is just for you. Go to www.hardincountywater2.org and click on the Bill Pay link.

Pay by Phone

Phone payments can be made 24/7 using our Interactive System. Call (270) 737-1056 press 4. Just make sure to have your water district account number handy.

Contact Our Office

We would love to hear from you. You can stop by our office where we have friendly folks that can serve you. Our office hours are 8:30 - 4:30 Monday - Friday.

District wins Governor's Safety Award.

Kentucky Labor Secretary Larry L. Roberts praised the employees for their dedication to safety.

"Good, clean water is so important to a community, and the employees of Hardin County Water District No. 2 work extremely hard to deliver that service on a daily basis," said Secretary Roberts. "Not only do they exceed in doing extremely good work, they go about everything they do with safety as a top priority."

"Considering that our employees work in high risk and exposed environments, this is an award that I am particularly proud of," said General Manager James Jeffries. "And because our employees are the most important assets we have, it is nice to know that we are keeping them safe while on the job."

The Kentucky Labor Cabinet presents the Governor's Safety and Health Award in recognition of outstanding safety and health performance.



Pictured is Trevor Mather, Field Crew Supervisor and Secretary Larry L. Roberts. Trevor is accepting the award on behalf of the District Employees.