



# Hickory Water District

## Water Quality Report for year 2017

KY0420194

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Water - Essential for Life

Meetings: Mayfield Electric & Water Office, 301 E. Broadway  
Meeting Dates and Time: 4th Tues of each month 8:00 AM

CCR Contact: **Same**  
Phone: **270-247-4661**

This report is designed to inform the public about the quality of water and services provided on a daily basis. Our commitment is to provide our customers with a safe, clean, and reliable supply of drinking water. We want to assure that we will continue to monitor, improve, and protect the water system and deliver a high quality product. Water is the most indispensable product in every home and we ask everyone to be conservative and help us in our efforts to protect the water source and the water system.

The drinking water for Hickory Water District (HWD) is treated by certified water system operators. HWD withdraws groundwater from 3 wells. A Wellhead Protection Program Plan has been developed for the water system and copies of the plan may be reviewed at our office during normal business hours. The source of raw water for HWD is the unconsolidated sands of the Claiborne Group in Graves County. An analysis of the overall susceptibility to contamination of HWD's water indicated that this susceptibility is low. There are 26 potential sources of contamination within the wellhead protection area with the following susceptibility ranking: 1 high, 5 medium, and 20 low. Source of high potential impact include: Highway 45. Sources of moderate to low impact include: septic systems, agricultural land and a cemetery. This is the summary of the susceptibility analysis. Please report any activity that you feel could jeopardize our water supply.

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).

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.

*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).*

**Some or all of these definitions may be found in this report:**

**Information About Lead:**

**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.

**Variations & 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.

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. Your local public water system 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>.

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The data presented in this report are from the most recent testing done in accordance with administrative regulations 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.

**Regulated Contaminant Test Results**

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
<b>Inorganic Contaminants</b>							
Barium [1010] (ppm)	2	2	0.006	0.006 to 0.006	Jul-17	No	Drilling wastes; metal refineries; erosion of natural deposits
Chromium [1020] (ppb)	100	100	3.1	3.1 to 3.1	Jul-17	No	Discharge from steel and pulp mills; erosion of natural deposits
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.183 (90 <sup>th</sup> percentile)	0.0106 to 0.489	Sep-16	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	0.3	0.3 to 0.3	Jul-17	No	Water additive which promotes strong teeth
Lead [1030] (ppb) sites exceeding action level 1	AL = 15	0	9 (90 <sup>th</sup> percentile)	0 to 35	Sep-16	No	Corrosion of household plumbing systems
Nitrate [1040] (ppm)	10	10	0.7	0.7 to 0.7	Jul-17	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits

**Disinfectants/Disinfection Byproducts and Precursors**

Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.05 (highest average)	0.47 to 1.36	2017	No	Water additive used to control microbes.
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Our water system violated one or more drinking water standards over the past year. Even though these were not emergencies, as our customers, you have the right to know what happened and what we did to correct these situations.

In the 2015 CCR, the Hickory Water District failed to submit the fluoride data under the correct contaminant heading. Hickory Water listed Dental Health Fluoride test results under KYDOW Regulated contaminants. Fluoride is only regulated by KYDOW under Inorganic chemical analysis Report. Dental Health Fluoride is checked daily by Hickory Water Plant and reviewed twice a month by Department for Public Health.

The table below list the Inorganic Regulated Contaminant for Fluoride. Required sampling frequency is one in a three year window. Inorganic Regulated Contaminat were taken in July 2014 and the Inorganic for Fluoride was listed in the 2016 CCR

Inorganic Regulated Contaminant	Maximum Allowable Level	Report Level	Range of Detection	Date of Sample
Fluoride	4	1.3	1.3 to 1.3	Jul_14

The 2015 CCR incorrectly listed the Combined Radium results in the data table. The report level was listed as 1.3 and the range of detection was list as 1.3 to 1.3 . The Maximum Contaminant Level for Combined Radium is 5.0. The correct results were null or no detect . The 2017 CCR is correct in not listing Combined Radium in the table since there was a Non detect or null sample for Combined Radium in the 2017 results. Combined Radium is listed under Radioactive Contaminants. Hickory Water is now required to sample for Radioactive Contaminants once in a six year window.

This report will not be mailed to individuals unless requested. If you desire to receive a copy, a request can be made at the Mayfield Electric and Water office during regular business hours. This report will also be posted at the Mayfield office, at our website [www.mayfieldews.com](http://www.mayfieldews.com) and listed in the Mayfield Messenger.

Please share this information with all other people who drink this water, especially those who may not have received this notice through our listing in the Mayfield Messenger or on our website. You can do this by posting this notice in a public place or distributing copies by hand or mail. If you have any questions about our water system or of this report, please contact Kevin Leonard at 270-247-4661.