# Hickman Water Department 2018 Water Quality Report

City Clerk: Donna Haney CCR Contact: Donna Haney Address: 1812 South 7th Street Hickman, Kentucky 42050 Meetings: Hickman City Hall / 2nd Monday of each month at 7:00 PM PWSID: KY0380193 Phone: (270) 236-2535

Groundwater is the sole source of water for the city. Hickman Water Department treats water from three wells drilled to a depth in excess of 750' into the aquifers of Claiborne Group. Raw water is pumped from the wells to our treatment plant where iron and manganese are removed. The water is filtered after which the pH is adjusted and disinfectants are added to further protect public health. A wellhead protection plan has been developed and approved by the KY Division of Water. Part of this plan includes a source water assessment and susceptibility analysis. The susceptibility analysis is used to determine the risk of contamination from various land uses to the aquifer. This is based on several factors; well depth and type of aquifer, proximity of contaminant sources to the well field, and the nature of the contaminant source. Overall, the susceptibility rating for the aquifer source is moderate due to some agricultural and light industrial activities. Potential sources include storage tanks, a railroad line and a solid waste landfill. Activities and land use within the protection can pose potential risks to your drinking water. Under certain circumstances contaminants could be released that would pose challenges to water treatment or even get into your drinking water. These activities, and how they are conducted, are of interest to the entire community because they potentially affect your health and the cost of treating your water. The complete wellhead protection plan can be reviewed at the Purchase Area Development District is located at 1002 Medical Drive, Mayfield, KY 42066.

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).

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.

#### 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.

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. Copies of this report are available upon request by contacting our office during business hours.

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.

<b>Regulated Contaminant Test</b>	Results								
Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection		Date of Sample	Violation	Likely Source of Contamination	
Inorganic Contaminants									
Barium [1010] (ppm)	2	2	0.214	0.214	to	0.214	Feb-17	No	Drilling wastes; metal refineries; erosion of natural deposits
Chromium [1020] (ppb)	100	100	7.4	7.4	to	7.4	Feb-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	0.516 (90 <sup>th</sup> percentile)	0	to	0.598	Jun-18	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	0.40	0.4	to	0.4	Feb-17	No	Water additive which promotes strong teeth
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	2 (90 <sup>th</sup> percentile)	0	to	4	Jun-18	No	Corrosion of household plumbing systems
Disinfectants/Disinfection By	products						-		•
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.21 (highest average)	0.9	to	1.2	2018	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids] (Annual Sample)	60	N/A	3 (high site)	2 (range o	to of indiv	3 ridual sites)	2018	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes] (Annual Sample)	80	N/A	4 (high site)	4	to	4 ridual sites)	2018	No	Byproduct of drinking water disinfection.

#### Violation: 2018-9935430 Consumer Confidence Report

We received a violation for failing to properly prepare and distribute the 2016 Consumer Confidence Report (CCR). The CCR data table had incorrect results listed for lead, copper, trihalomethane and fluoride. The website address listed on the CCR Certification form did not match the website that was distributed to the public via the billing card, therefore the Division of Water could not confirm its publication. Anyone wishing to review the corrected 2016 CCR can go to www.krwa.org/2016ccr/hickman.pdf or contact Hickman City Hall if you would like to receive a paper copy. This violation will be returned to compliance upon successful publication and certification of the 2018 CCR. There are no health effects associated with this violation.

#### Violation: 2019-9935442 Consumer Confidence Report

We received a violation for failing to properly distribute the 2017 Consumer Confidence Report (CCR) to our customers. The website address listed on the billing card did not match the actual web address linked to the CCR. Anyone wishing to review the 2017 CCR can go to www.krwa.org/2017ccr/hickman.pdf or contact Hickman City Hall if you would like to receive a paper copy. This violation will be returned to compliance upon successful publication and certification of the 2018 CCR. There are no health effects associated with this violation.

#### Violation: 2016-9935418 Sanitary Survey

We received a violation for failing to respond to non-significant deficiencies noted on a Sanitary Survey. The response was due to the Division of Water by 1/14/16. We responded on 2/16/16. This violation will be returned to complaince upon successful publication and certification of the 2018 CCR. There are no health effects associated with this violation.

### Violations: Chlorine & Monthly Operating Report

We received 28 violations for deficiencies occurring between June 2016 - March 2019 where we did not complete all monitoring for chlorine and / or failed to submit or correctly report testing for chlorine on the Monthly Operating Report (MOR). Each month we are required to complete a Monthly Operation Report (MOR) and submit it to the Kentucky Division of Water by the tenth of the following month. This report includes daily testing results for chlorine residual and other treatment plant data. These violations occurred because a former supervisor failed to perform their duties. We will be returned to compliance upon successful completion of the required formal Public Notice. There are no health effects associated with this violation.

## Notice by Hickman Water Department – System ID#: KY0380193

Our water system recently violated a drinking water standard. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did (are doing) to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During June 2016 – March 2019, we did not complete all monitoring by failing to report or correctly report testing for chlorine. Therefore, we could not verify the quality of your drinking water to the primacy agency during that time.

Each month we are required to complete a Monthly Operation Report (MOR) and submit it to the Kentucky Division of Water by the tenth of the following month. This report includes daily chlorine monitoring results. The individual violations for Chlorine and MOR are listed in the tables below.

Chlorine Reporting Violations						
Violation Number	Compliance Period	Explanation				
2019-9935452	March 2019	Submitted 5/3/19 due to administrative oversight. Procedures have				
		been developed ensure that reports are mailed on time.				
2019-9935450	January 2019	Failed to submit the Daily Chlorine Residuals				
2019-9935446	December 2017	Failed to submit the Daily Chlorine Residuals				
2019-9935445	October 2018	Failed to submit the Daily Chlorine Residuals				
2019-9935441	August 2018	Failed to submit the Daily Chlorine Residuals				
2019-9935439	July 2018	Failed to submit the Daily Chlorine Residuals				
2018-9935437	April 2018	Submitted 6/10/18				
2018-9935434	February 2018	Submitted 6/10/18				
2018-9935432	January 2018	Submitted 6/10/18				
2018-9935429	October 2017	Submitted 2/9/18				
2018-9935427	September 2017	Submitted 2/9/18				
2018-9935424	August 2017	Submitted 2/9/18				
2016-9935420	June 2016	Submitted 7/10/16				

Monthly Operating Report Violations						
Violation Number	Compliance Period	Explanation				
2019-9935451	March 2019	Submitted 5/3/19 due to administrative oversight. Procedures have				
		been developed ensure that reports are mailed on time.				
2019-9935449	January 2019	Failed to submit the Monthly Operating Report				
2019-9935448	December 2018	Failed to submit the Monthly Operating Report				
2018-9935447	December 2017	Failed to submit the Monthly Operating Report				
2019-9935444	October 2018	Failed to submit the Monthly Operating Report				
2019-9935443	September 2018	Failed to submit the Monthly Operating Report				
2019-9935440	August 2018	Failed to submit the Monthly Operating Report				
2019-9935438	July 2018	Failed to submit the Monthly Operating Report				
2019-9935436	April 2018	Submitted 6/10/18				
2018-9935435	March 2018	Submitted 6/10/18				
2018-9935433	February 2018	Submitted 6/10/18				
2018-9935431	January 2018	Submitted 6/10/18				
2018-9935428	October 2017	Submitted 12/11/17				
2018-9935425	September 2017	Submitted 2/9/18				
2018-9935423	August 2017	Submitted 2/9/18				

There is nothing you need to do at this time. There are no potential adverse health effects related to the reporting violations, no population is at risk, and there is no need to use alternative water supplies.

These violations occurred because a former supervisor failed to perform their duties. All missing or overdue reports have been submitted where the information could be located. Hickman has contracted with Alliance Water Resources to provide professional operation and maintenance services. Alliance will operate our drinking water utility in compliance and make much needed repairs throughout the system. Additionally, Bell Engineering is overseeing a water plant upgrade and city administrators are working with the Division of Water and technical assistance providers. We expect to be returned to compliance within the next 12 months.

For more information, please contact Donna Haney at 270-236-2535 or 1812 South 7<sup>th</sup> Street, Hickman, KY 42050.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.