



# Consumers Water District

## Water Quality Report for year 2016

KY0420084

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Meetings: Mayfield Electric and Water Office

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Water - Essential for Life

Meeting Dates and Time: 4th Tuesday of the month 8:00 AM

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 Consumers is purchased from Mayfield Water System and is treated by certified water system operators. Groundwater is obtained from three wells drilled into an aquifer of the Claiborne Group beneath our community. The susceptibility to contamination for our source of water is generally low but there are areas of concern. Groundwater can become contaminated due to chemical spills near highways and industrial sites. It can also be contaminated due to underground fuel storage tanks or agriculture activities. Another area of concern is unreported or improperly capped wells drilled into the same aquifer. A Wellhead Protection Plan was developed to identify any potential contaminant source that may threaten our water supply. The source water assessment to determine potential contaminant sources indicates that currently none of the concerns mentioned above are posing a threat to the water supply but we will continue to monitor activities in the area. The Wellhead Protection Plan is available for review at our office during normal business hours. We encourage you to help us protect your drinking water supply by reporting any activity that may pose a threat.

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 front 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.

**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.

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>.

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>Microbiological Contaminants</b>							
Total Coliform Bacteria # or % positive samples	1	0	2	N/A	2016	No	Naturally present in the environment
<b>Radioactive Contaminants</b>							
Combined radium (pCi/L)	5	0	1.4	1.4 to 1.4	Oct-14	No	Erosion of natural deposits
<b>Inorganic Contaminants</b>							
Barium [1010] (ppm)	2	2	0.018	0.018 to 0.018	Jul-14	No	Drilling wastes; metal refineries; erosion of natural deposits
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.0245 (90 <sup>th</sup> percentile)	0.0015 to 0.164	Sep-14	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	0.8	0.8 to 0.8	Jul-14	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	2.8	2.8 to 2.8	Jul-16	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Selenium [1045] (ppb)	50	50	1.9	1.9 to 1.9	Jul-14	No	Discharge from petroleum and metal refineries or mines; erosion of natural deposits
<b>Volatile Organic Contaminants</b>							
Tetrachloroethylene [2987] (ppb)	5	0	2.2	2.2 to 2.2	Aug-16	No	Leaching from PVC pipes; discharge from factories and dry cleaners
<b>Disinfectants/Disinfection Byproducts and Precursors</b>							
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.24 (highest average)	0.82 to 1.63	2016	No	Water additive used to control microbes.
TTHM (ppb) (Stage 2) {total trihalomethanes} (Annual Sample)	80	N/A	8 (high site)	5 to 8 (range of individual sites)	2016	No	Byproduct of drinking water disinfection.

Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and correct any problems that were found during these assessments.

August 16, 2016 three routine samples were taken for the Consumers Water District. One of the samples came back positive for total coliform. We retested the original site, as well as, an upstream site and downstream site. The original site was positive again for total coliform, but the upstream and downstream sites showed no signs of total coliform. We were required to do a level 1 assessment. After investigation of the original site, the hydrant where the original sample was taken was found to be contaminated by a spider web. The Hydrant was disinfected and resampled. Samples were again taken from the original site, upstream site and downstream site. After retest all samples were found absent of any total coliforms.

During the past year we were required to conduct one level 1 assessment. One level 1 assessment were completed. In addition, we were required to take 1 corrective action and we completed 1 corrective action.

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.