

# East Pendleton County Water District Water Quality Report 2021

Water System ID: KY0960112 Manager: Wayne Lonaker 859-654-2100	CCR Contact: Wayne Lonaker 859-654-2100	Mailing Address: P.O. Box 29 Falmouth, KY 41040	Meeting location and time: Water District Office Third Tuesday monthly at 3:00PM
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We buy our water from the City of Falmouth and from the Bracken County Water District which buys their water from the City of Augusta and Western Mason Water District. Falmouth treats surface water from the Licking River and Augusta and Western Mason treat groundwater from wells drilled along the Ohio River. Susceptibility to contaminants in both water sources is moderate. The area around the Licking River and the wells is mostly residential but also contains some agricultural, recreational, and light industry activities. There is potential for spills and polluted runoff from areas of row crops and urban and recreational grasses which introduce the potential for herbicide, pesticide and fertilizer contaminants. Bridges, railroads, wastewater discharges and waste handlers in the area introduce the potential for spills or leaks of hazardous materials. The complete source water assessment for Falmouth can be reviewed at the Northern KY Area Development District while the assessment for Augusta Regional can be reviewed at Buffalo Trail Area Development District. The complete assessment for Western Mason Water District can be viewed at the Western Mason Water District office.

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).

## Information About Lead:

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.

**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.

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

**This report will not be mailed unless requested. If you would like a copy mailed to you please contact our office.**

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.

**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.**

### Regulated Contaminant Testing Results from Augusta Regional Water Commission

Regulated Contaminant Test Results								Augusta Regional Water	
Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection		Date of Sample	Violation	Likely Source of Contamination	
<b>Radioactive Contaminants</b>									
Combined radium (pCi/L)	5	0	0.203	0.203 to 0.203		May-20	No	Erosion of natural deposits	
<b>Inorganic Contaminants</b>									
Barium [1010] (ppm)	2	2	0.047	0.047 to 0.047		Apr-20	No	Drilling wastes; metal refineries; erosion of natural deposits	
Fluoride [1025] (ppm)	4	4	0.88	0.88 to 0.88		Apr-20	No	Water additive which promotes strong teeth	
Nitrate [1040] (ppm)	10	10	0.604	0.604 to 0.604		Mar-21	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits	
<b>Other Constituents</b>									
Turbidity (NTU) TT * Representative samples	Allowable Levels		Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity			
Turbidity is a measure of the clarity of the water and not a contaminant.	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples		0.406	99	No	Soil runoff			

### Regulated Contaminant Testing Results from Western Mason Water District

Regulated Contaminant Test Results								Western Mason Water District	
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	0.042	0.042 to 0.042		Apr-20	No	Drilling wastes; metal refineries; erosion of natural deposits	
Fluoride [1025] (ppm)	4	4	0.57	0.57 to 0.57		Apr-20	No	Water additive which promotes strong teeth	
Nitrate [1040] (ppm)	10	10	5.28	4.38 to 5.28		Mar-21	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits	
Nitrite [1041] (ppm)	1	1	0.01	0 to 0.01		Mar-21	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits	

Nitrate. Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

### Regulated Contaminant Testing Results from the City of Falmouth

Regulated Contaminant Test Results		Falmouth Water Department					
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	0.019	0.019 to 0.019	Jan-21	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	0.23	0.23 to 0.23	Jan-21	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	0.436	0.436 to 0.436	Jan-21	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
<b>Disinfectants/Disinfection Byproducts and Precursors</b>							
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.76 (lowest average)	1.50 to 2.03 (monthly ratios)	2021	No	Naturally present in environment.
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.							
<b>Other Constituents</b>							
Turbidity (NTU) TT * Representative samples	Allowable Levels		Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity	
Turbidity is a measure of the clarity of the water and not a contaminant.	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples		0.18	100	No	Soil runoff	

### Regulated Contaminant Testing Results from East Pendleton County Water District

Regulated Contaminant Test Results		East Pendleton Water District					
Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.09 (highest average)	0.49 to 1.91	2021	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	44 (high site average)	27 to 56 (range of individual sites)	2021	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	45 (high site average)	16.6 to 63.4 (range of individual sites)	2021	No	Byproduct of drinking water disinfection.
<b>Household Plumbing Contaminants</b>							
Copper [1022] (ppm) sites exceeding action level 1	AL = 1.3	1.3	1.0076 (90th percentile)	0.0192 to 1.504	Jul-20	No	Corrosion of household plumbing systems
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	3.7 (90th percentile)	0 to 5.5	Jul-20	No	Corrosion of household plumbing systems

