

# Maysville Utility Commission

## Water Quality Report 2015

Water System ID: KY0810275  
Manager: Eddie Wenz  
606-564-3531

CCR Contact: Greg T. England  
606-564-2513

Mailing Address:  
P.O. Box 406  
Maysville, KY 41056

Meeting location and time:  
216 Bridge St, Maysville  
Second Wednesday at 10:00 AM

We are pleased to present this Annual Water Quality Report. The main source of water for Maysville customers is surface water from the Ohio River. This report is designed to inform the public about the quality of the water and services provided on a daily basis. The following is a summary of the system's susceptibility to contamination, which is part of the complete Source Water Assessment Plan (SWAP), and is available for inspection at the Buffalo Trace Area Development District office in Maysville. An analysis of the susceptibility of the Maysville Utility water supply to contamination indicates that the susceptibility is generally high. There are several areas of high concern near the raw water withdrawal site. These sites of high concern include: Ports along the Ohio River where accidental spills of chemicals and petroleum products can occur, bridges located near the intake site, railroads and agricultural areas. Other sites of medium concern include an historical landfill site and an abandoned oil or gas well. The full test of the source water assessment can be viewed at the Buffalo Trace Area Development District office in Maysville.

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.

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.

	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source
Turbidity (NTU) TT * Representative samples of filtered water	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples	0.32	99	No	Soil runoff

#### Regulated Contaminant Test Results

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Alpha emitters [4000] (pCi/L)	15	0	0.2	0.2 to 0.2	Mar-11	No	Erosion of natural deposits
Combined radium (pCi/L)	5	0	0.3	0.3 to 0.3	Mar-11	No	Erosion of natural deposits
Barium [1010] (ppm)	2	2	0.031	0.031 to 0.031	Feb-15	No	Drilling wastes; metal refineries; erosion of natural deposits
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.11 (90 <sup>th</sup> percentile)	0.0098 to 0.194	Sep-13	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	0.5	0.5 to 0.5	Feb-15	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 5	Sep-13	No	Corrosion of household plumbing systems
Nitrate [1040] (ppm)	10	10	0.8	0.8 to 0.8	Feb-15	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.55 (lowest average)	1.03 to 2.11 (monthly ratios)	2015	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.							
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.01 (highest average)	0.27 to 1.83	2015	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	38 (high site average)	12 to 42 (range of individual sites)	2015	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	54 (high site average)	13 to 96 (range of individual sites)	2015	No	Byproduct of drinking water disinfection.

#### Other Contaminants

Cryptosporidium [oocysts/L]	0	TT (99% removal)	0 (positive samples)	8 (no. of samples)	2015	No	Human and animal fecal waste
-----------------------------	---	------------------	----------------------	--------------------	------	----	------------------------------

Cryptosporidium. We are required to monitor the source of your drinking water for Cryptosporidium in order to determine whether treatment at the water treatment plant is sufficient to adequately remove Cryptosporidium from your drinking water.

Fluoride (added for dental health)	Average	Range of Detection
	0.8	0.4 to 1.22
Sodium (EPA guidance level = 20 mg/L)	26.1	26.1 to 26.1

Unregulated Contaminants (UCMR 3)	average	range (ppb)	date
1,4-dioxane	0.166	BDL to 0.37	Nov-14
vanadium	0.085	0 to 0.264	Aug-15
molybdenum	1.575	1.25 to 2.32	Aug-15
strontium	103.983	30 to 252	Nov-14
chromium-6	0.095	0.1 to 0.13	May-15
total chromium	0.029	BDL to 0.2	Nov-14

*EPA has not established drinking water standards for unregulated contaminants. There are no MCL's and therefore no violations if found.*

Secondary contaminants do not have a direct impact on the health of consumers and are not required in the Consumer Confidence Report. They are being included to provide additional information about the quality of the water.

Secondary Contaminant	Maximum Allowable Level	Report Level	Range of Detection	Date of Sample
Chloride	250 mg/l	44.1	44.1 to 44.1	Feb-15
Copper	1.0 mg/l	0.0014	0.0014 to 0.0014	Feb-15
Corrosivity	Noncorrosive	-0.661	N/A	Feb-15
Fluoride	2.0 mg/l	0.5	0.5 to 0.5	Feb-15
Iron	0.3 mg/l	0.045	0.045 to 0.045	Feb-15
Manganese	0.05 mg/l	0.003	0.003 to 0.003	Feb-15
pH	6.5 to 8.5	7.54	7.54 to 7.54	Feb-15
Sulfate	250 mg/l	59	59 to 59	Feb-15
Total Dissolved Solids	500 mg/l	146	146 to 146	Feb-15
Zinc	5 mg/l	0.01	0.01 to 0.01	Feb-15

Violation Number 2015-9950642:

Our water system violated a drinking water requirement during the past year. Even though this was not an emergency, as our customers, you have a right to know what happened and what we are doing to correct this situation. There is nothing you need to do at this time.

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 1/1/2015 – 1/31/2015 we did not complete all monitoring or testing for filter individual filter effluent turbidity and therefore cannot be sure of the quality of your drinking water during that time.

We received a violation for failure to collect grab samples every four hours of operation after individual filter effluent turbidimeters failure during the January 2015 compliance period. On January 26, 2015 the finished water turbidimeter for the combined filter effluent at the Maysville water treatment plant was inoperable. All filters remained in service. The operators collected grab samples for the combined turbidity effluent every four hours until the continuous monitoring equipment could be repaired. The Monthly Operating Report was not completed correctly to accurately represent the incident. The corrected MOR has since been submitted and procedures established to prevent this from happening in the future.

\*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.\*

This report will not be mailed unless requested. Contact our office if you would like a copy mailed to you.