Harrodsburg Water Department
Water Quality Report 2015

Water System ID: KY0840180 WTP Superintendent: Levi Henderson 859/748-5198 ext. 301	CCR Contact: Levi Henderson 859/748-5198 ext. 301 lhenderson@harrodsburgcity.org	Mailing Address: 208 South Main Street Harrodsburg, KY 40330	Meeting location and time: 208 South Main Street Second and Fourth Monday at 7:00 PM

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

Harrodsburg Municipal Water Department currently employs eight full time operators and five Distribution & Maintenance personnel. Our department is dedicated to achieving the highest water quality standards and providing excellent service to our consumers.

Following is a summary of the Harrodsburg water systems susceptibility to contamination. The Harrodsburg Water Department treats surface water from the Kentucky River near High Bridge. A complete assessment is available for inspection at Harrodsburg City Hall, 208 S. Main Street, Harrodsburg, KY 40330. The susceptibility analysis indicates that this susceptibility is generally moderate although there are a few areas of high concern. Herrington Lake, a tributary to the Kentucky River, has been identified as impaired. The condition of this lake may indicate conditions in the watershed that could adversely affect source water quality. Other areas of high concern include a railroad bridge, a highway bridge, areas of row crops, a waste generator or transporter and a KPDES permitted discharger. Finally, there are numerous permitted operations and activities and other potential contaminant sources of moderate concern within the greater watershed that increase the potential for the release of contaminants within the area. These potential contaminant sources include large capacity septic systems, major roads, underground storage tanks, & Tier II hazardous chemical users.

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.
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.

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	0.09	100	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
Barium [1010] (ppm)	2	2	0.02	0.02 to 0.02	Mar-15	No	Drilling wastes; metal refineries; erosion of natural deposits
Copper [1022] (ppm) sites exceeding action leve 0	AL = 1.3	1.3	0.05 (90th percentile)	0 to 0.19	Jul-13	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	1.1	1.1 to 1.1	Mar-15	No	Water additive which promotes strong teeth
Lead [1030] (ppb) sites exceeding action leve 0	AL = 15	0	0 (90th percentile)	0 to 4	Jul-13	No	Corrosion of household plumbing systems
Nitrate [1040] (ppm)	10	10	0.4	0.4 to 0.4	Nov-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	1.45 (lowest average)	0.76 to 2.14 (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	1.13 (highest average)	0.25 to 1.64	2015	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	59 (high site average)	6 to 84 (range of individual sites)	2015	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	71 (high site average)	17.2 to 100 (range of individual sites)	2015	No	Byproduct of drinking water disinfection.

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact our office during normal business hours.

Unregulated Contaminants (UCMR 3)	average	range (ppb)	date
vanadium	0.126	0 to 0.38	Jun-15
molybdenum	0.588	0 to 2.2	Dec-14
strontium	228.750	100 to 420	Jun-15
chromium-6	0.041	0.032 to 0.057	Mar-15
chlorate	9.813	0 to 29.3	Sep-14
total chromium	0.215	0.2 to 0.25	Jun-15

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

Fluoride (added for dental health)	Average	Range of Detection		
	1.0	0.9	to	1.1
Sodium (EPA guidance level = 20 mg/L)	13.0	13	to	13

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 addition information about the quality of the water.

Secondary Contaminant	Maximum Allowable Level	Report Level	Range of Detection			Date of Sample
Chloride	250 mg/l	19	19	to	19	Mar-15
Copper	1.0 mg/l	0.01	0.01	to	0.01	Mar-15
Corrosivity	Noncorrosive	-1.2	N/A			Mar-15
Fluoride	2.0 mg/l	1.1	1.1	to	1.1	Mar-15
pH	6.5 to 8.5	7.26	7.26	to	7.26	Mar-15
Sulfate	250 mg/l	55	55	to	55	Mar-15
Total Dissolved Solids	500 mg/l	192	192	to	192	Mar-15