

Dry Ridge Water Works Commission

Water Quality Report 2023

Water System ID: KY0410107
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Meeting location and time:
Dry Ridge City Building
Third Monday monthly at 6:00 PM

The City of Dry Ridge purchases water from the Williamstown Municipal Water Department. Williamstown treats surface water from Lake Williamstown. An analysis of the susceptibility of the Williamstown Municipal Water Department public water supply at Lake Williamstown to contamination indicates that this susceptibility is generally moderate. There are some areas of concern. Agricultural areas located in the watershed for Lake Williamstown's intake introduce the potential of agricultural chemicals and runoff, activities that contribute to non-point source pollution. Bridges, railroads, and Tier II hazardous chemical users in the area introduce the potential for spills of hazardous materials. Other areas of concern include power line right-of-ways with potential herbicide use, and major roads located throughout the watershed. The following is a summary of the systems susceptibility to contamination, which is a part of the completed Source Water Assessment and Protection Plan (SWAP). The completed plan is available for inspection at the Williamstown City Building, 400 north Main Street, Williamstown, KY 41097.

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:

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 water system is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact your local water system. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available 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.

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.

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.**

Regulated Contaminant Test Results								Dry Ridge Water Works Commission							
Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection		Date of Sample	Violation	Likely Source of Contamination							
E.coli Bacteria % positive samples	0%	0	1	N/A		2023	YES	Human and animal fecal waste							
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.29 (highest average)	0.66	to 1.84	2023	No	Water additive used to control microbes.							
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	55 (high site average)	34	to 77.5 (range of individual sites)	2023	No	Byproduct of drinking water disinfection							
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	45 (high site average)	23.7	to 60.3 (range of individual sites)	2023	No	Byproduct of drinking water disinfection.							
Household Plumbing Contaminants															
Copper [1022] (ppm) Round 1 sites exceeding action level 0	AL = 1.3	1.3	0.24 (90 th percentile)	0.036	to 0.29	Sep-22	No	Corrosion of household plumbing systems							

Regulated Contaminant Test Results								Williamstown Municipal Water Department							
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	0.009	0.009	to 0.009	Apr-23	No	Drilling wastes; metal refineries; erosion of natural deposits							
Fluoride [1025] (ppm)	4	4	0.73	0.73	to 0.73	Apr-23	No	Water additive which promotes strong teeth							
Disinfectants/Disinfection Byproducts and Precursors															
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.15 (lowest average)	0.88	to 1.37 (monthly ratios)	2023	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.															
Chlorite (ppm)	1	0.8	0.59 (average)	0.33	to 0.68	2023	No	Byproduct of drinking water disinfection.							
Chlorine dioxide (ppb)	MRDL = 800	MRDLG = 800	650	0	to 650	2023	No	Water additive used to control microbes.							
Other Constituents															
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		0.08	100	No	Soil runoff									

Your drinking water has been sampled for a series of unregulated contaminants. Unregulated contaminants are those for which EPA has not established drinking water standards. There are no MCLs and therefore no violations if found. The purpose of monitoring for these contaminants is to help EPA determine where the contaminants occur and whether they 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. None of the 30 unregulated contaminants were detected.

Violation 2024-9593929

In August 2023, Dry Ridge Water received a violation. We failed to take all required repeat samples following an E. coli-positive routine sample. The business where we had taken the positive sample was not open over the weekend and we failed to communicate this in a timely manner to the Kentucky Division of Water. Repeat samples were collected as soon as possible and all repeats were negative for coliform bacteria.

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

A Public Notification was issued at the time of the sampling incident and Dry Ridge Water returned to compliance.

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. To request a paper copy of this report, call (859) 824-3335.