Morehead Utility Plant Board
Water Quality Report
2024

For previous reports, include year.
Example: tapwaterinfo.com/2023/moreheadupb

Water System ID: KY1030292 Manager: Holly McGrath-Rosas
CCR Contact: Holly McGrath-Rosas Phone: 606-784-5538
Mailing Address: 135 South Wilson Avenue Morehead, KY 40351
Meeting Location and Time: MUPB Office, Last Monday each month at 12:00 noon

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). 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 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).

Source Information:
Our water source is surface water from the Licking River. Activities and land uses upstream of the source water intake can pose potential risks to your drinking water. These activities, and how they are conducted, are of interest to the entire community because they potentially affect your health and the cost of treating your water. An analysis of the susceptibility of the raw water supply to contamination indicates that the susceptibility potential is generally moderate. There are a few areas of high concern near the raw water withdrawal site. Farming sites located in the area present the possibility of impact from the application of pesticides and fertilizer. Bridges and major road ways also pose a threat to the source in the event of an accidental spill. Other sites of medium concern include a marina, a fish hatchery, the presence of an underground storage tank and a small grocery/gas station, and a manufacturing industry. The complete Source Water Assessment is available for inspection at the Water Treatment Plant.

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.

We are required to annually provide information about the health risks from lead in drinking water to schools and child care facilities. All elementary schools, secondary schools, and child care facilities are eligible to be sampled for lead by our water system. Contact our office for scheduling or to learn results of previous sampling.

Service Line Inventory Information:
To address lead in drinking water, EPA requires that all community water systems develop and maintain an inventory of service line materials. We have completed a service line inventory (SLI) and it is available for review at our office or online at www.mupb.com/water-treatment-plant/ Scroll to the bottom of the page and click on "Water Service Line Inventory" under the "Compliance" heading.

Lead Sample Results Availability Information:
We are required to periodically sample water from customer taps to determine lead and copper levels. EPA sets the lead action level at 0.015 mg/L (15 ppb). For a water system to be in compliance, at least 90% of tap water samples must have lead levels below this limit. This report contains the 90th percentile and range of our most recent sampling. The individual results for each location sampled can be reviewed at our office.

We are only required to test for some contaminants periodically, so the results listed in this report may not be from the previous year. Only detected contaminants are included in this report. For a list of all contaminants we test for please contact us. Copies of this report are available upon request by contacting our office.

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.

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. Copies are available in our office. If you would like to receive a copy by mail, please contact our office.

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. MUPB began sampling for these contaminants in 2025, but so far none have been detected. 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.

Regulated Contaminant Test Results			Morehead Utility Plant Board			
Contaminant [code] (units)	**MCL**	**MCLG**	**Report Level**	**Range of Detection**	**Date of Sample**	**Violation**	**Likely Source of Contamination**
Radioactive Contaminants							
Combined radium (pCi/L)	5	0	1.02	1.02 to 1.02	May-20	No	Erosion of natural deposits
Inorganic Contaminants							
Barium [1010] (ppm)	2	2	0.023	0.023 to 0.023	Mar-24	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	0.59	0.59 to 0.59	Mar-24	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	0.236	0 to 0.236	May-24	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Disinfectants/Disinfection Byproducts and Precursors							
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.12 (lowest average)	1.00 to 1.45 (monthly ratios)	2024	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	0.98 (highest average)	0.62 to 1.44	2024	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	33 (high site average)	17 to 33 (range of individual sites)	2024	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	67 (high site average)	27 to 92 (range of individual sites)	2024	No	Byproduct of drinking water disinfection.
Household Plumbing Contaminants							
Copper (ppm) Round 1 sites exceeding action level 0	AL = 1.3	1.3	0.199 (90^{th} percentile)	0.005 to 0.328	Jul-24	No	Corrosion of household plumbing systems
Lead (ppb) Round 1 sites exceeding action level 1	AL = 15	0	2 (90^{th} percentile)	0 to 18	Jul-24	No	Corrosion of household plumbing systems
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		0.204	100	No	Soil runoff	

	Average	**Range of Detection**
Fluoride (added for dental health)	0.8	0.52 to 1.64
Sodium (EPA guidance level = 20 mg/L)	8.1	8.1 to 8.1

Secondary Contaminant	**Maximum Allowable Level**	**Report Level**	**Range of Detection**	**Date of Sample**
Chloride	250 mg/l	12.1	12.1 to 12.1	Mar-24
Corrosivity	Noncorrosive	-1.44	-1.44 to -1.44	Mar-24
Fluoride	2.0 mg/l	0.53	0.53 to 0.53	Mar-24
Odor	3 threshold odor number	3	3 to 3	Mar-24
pH	6.5 to 8.5	7.53	7.53 to 7.53	Mar-24
Sulfate	250 mg/l	25	25 to 25	Mar-24
Total Dissolved Solids	500 mg/l	116	116 to 116	Mar-24

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