

Manager: Paul Wood**Contact: Greg Roberts****Phone: 270-762-0345****Address: 200 Andrus Drive, Murray Ky 42071****Meetings: Public Meeting at City Hall 500 Main St 2nd Thursday of each month @ 6:30**

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 number 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).

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>.

Service Line Inventory Information:

The Murray Water System has conducted a lead service line inventory. That report will show the number of lead service lines and the number of unknown service lines in our system. You can view a copy of that report at:

<https://www.arcgis.com/apps/dashboards/b2df715563114d2a87accf39ce17af55>

If you have any questions regarding the report, you can contact James Erwin at (270) 762-0336

Lead Sample Results Availability Information:

If you would like to see the results of our Lead & Copper testing you may contact the Drinking Water Treatment Plant by calling (270)762-0345.

Source Information:

Murray's Water Supply comes from a ground water source drawn from six wells located within the McNairy Formation Aquifer. As determined by the Wellhead Protection Plan phase II submittal the aquifers susceptibility to contamination has been determined to be a medium risk. Sources of potential impact include railroads, highways and an electric sub-station within groundwater recharge areas. Water systems in Kentucky must test for many contaminants. Only those contaminants that were detected are included in the test results table. All the tests are available upon request at the water treatment plant office. Murray water routinely monitors for contaminants in your drinking water according to Federal and State laws. The table enclosed within shows the results of our monitoring for the period of 1/1/24 to 12/31/24. If you have questions about this report or to request a copy of the Wellhead Protection Plan, please contact Greg Roberts at (270) 762-0345. More information, including water conservation tips can be found on the City of Murray website at www.MurrayKy.gov. We at Murray Water Treatment work diligently to provide top quality water to every tap. Our water treatment operators are highly trained and certified by the state of Kentucky.

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. Continued-

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.

Regulated Contaminant Test Results Murray Water System								
Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination	
Radioactive Contaminants								
Beta photon emitters (pCi/L)	50	0	2	2 to 2	Jan-17	No	Decay of natural and man-made deposits	
Alpha emitters [4000] (pCi/L)	15	0	1.2	1.2 to 1.2	Jan-17	No	Erosion of natural deposits	
Inorganic Contaminants								
Fluoride [1025] (ppm)	4	4	0.94	0.94 to 0.94	Feb-23	No	Water additive which promotes strong teeth	
Disinfectants/Disinfection Byproducts and Precursors								
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.33 (highest average)	0.95 to 1.57	2024	No	Water additive used to control microbes.	
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	42 (high site average)	3.43 to 72 (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	0.055 (90 th percentile)	0.0054 to 0.094	Jun-22	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		0.059	100	No	Soil runoff		

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct (1) Level 1 Assessment. (1) Level 1 Assessment was completed. In addition, we were required to take (1) corrective action and we completed (1) of these actions.