2024 Consumer Confidence Report

WATER SYSTEM: Manchester Water Works KY PWSID: KY0260737

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PUBLIC MEETING LOCATION: City Hall DATE & TIME: 3rd Monday each month/6:00 pm

We test our drinking water as required by the state and federal regulations. This report shows the results of monitoring from January 2024 to December 2024. Manchester Water Works is only required to test for some contaminants periodically, so the results listed in this CCR 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.

WHERE DOES MY WATER COME FROM?

SOURCE(S) OF WATER: Manchester Water Works pumps raw water from Bert T. Combs Lake and Goose Creek. This is the source water for all Manchester Water Works customers except for those who live on Urban Creek. If you live on Urban Creek, your drinking water comes from East Laurel Water District (PWSID:KY-0630797). Their water source is Wood Creek Lake. In the following treated water summary tables, water from Manchester Water Works will be designated as A and East Laurel Water District will be designated as B.

TYPE OF WATER SOURCE: SURFACE WATER

SOURCE WATER ASSESSMENT/WELLHEAD PROTECTION PROGRAM INFORMATION: Manchester Water Works (PWSID=KY0260737) Source Water Assessment Plan (SWAP) is available for inspection at City Hall.

East Laurel Water District's (PWSID=KY0630797) SWAP is available for inspection at the Laurel County Judge's office or the Cumberland Valley Area Development District office in London.

WATER QUALITY TABLES

Table of Lead and Copper Detections

Contaminant (units) [Sample Year]	Action Level (AL)	MCLG	# of Individual Taps over AL	90% of taps tested were less than	Range of Samples	In Compliance?	Typical Source of Contamination
Lead (ppb) [20__]	15 ppb	0 ppb	A=0 B=0	A=0 B=0	A=0 TO 6 B=0 TO 2	Yes	Corrosion of household plumbing systems; erosion of natural deposits
	0 out of 30 taps were found to have levels in excess of the lead action level of 15 ppb for each system						
Copper (ppm) [20__]	1.3 ppm	1.3 ppm	A-0 B=0	A=0.165 B=0.528	A=0.005 to 0.20 B=0.026 to 1.23	Yes	Corrosion of household plumbing systems; erosion of natural deposits
	0 out of 30 taps were found to have copper levels in excess of the copper action level of 1.3 ppm for each system						

Important 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. Manchester Water Works *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 Josh Murphy at manchesterwtp@yahoo.com. 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.

Manchester Water Works has completed an initial inventory of all the service lines served by our water system. The results can be accessed by stopping by City Hall or emailing Josh Murphy at manchesterwtp@yahoo.com.

1 ppm = 1 mg/L

This is true for water because one liter of water contains exactly one million milligrams of water!

mg/L just means the mass (in milligrams) of a contaminant dissolved in a liter of water

For example, it is safe to have up to 4 mg of Chlorine per each liter of water or 4 ppm

1 ppb = 1 ug/L

1 ppm = 1000 ppb and 1 mg/L = 1000 ug/L so 1 ppb would be the same as 1 ug/L in water!

Table of Disinfectants/Disinfection Byproducts and

1 part per million (ppm)

4 drops of ink mixed in a 55 gallon barrel of water

1 part per billion (ppb)

1 drop of ink mixed in a 9000 gallon fuel tank truck

Precursors

Contaminant (*units*)	MCLG or MRDLG	MCL, TT*, or MRDL	Level Detected	Range	In Compliance?	Sample Year	Typical Source
Total Organic Carbon (*ppm*) (measured as ppm but reported as ratio)	N/A	TT	A=1.04 B=2.09 (*lowest average ratio*)	A=1.00 to 2.05 B=1.16 to 3.68 (*monthly removal ratios*)	Yes	2024	Naturally present in the environment
Chlorine (*ppm*)	MRDLG=4	MRDL=4	A=1.51 B=1.77 (*highest average*)	A=0.92 to 1.94 B=1.13 to 2.60	Yes	2024	Water additive used to control microbes
HAA (*ppb) [Haloacetic acids]*	N/A	MCL=60	A=52 B=29 (*high site average*)	A=19 to 67 B=17 to 33	Yes	2024	Byproduct of drinking water disinfection
TTHM (*ppb*) [*total trihalomethanes*]	N/A	MCL=80	A=70 B=40 (*high site average*)	A=21 to 90 B=14 to 53	Yes	2024	Byproduct of drinking water disinfection

*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.

Table of Detected Regulated Contaminants

Contaminant (units)	MCLG	MCL	Highest Level Detected	Range of Detected Levels	In Compliance?	Sample Year	Typical Source of Contaminant
Inorganic Contaminants							
Barium [1010] (ppm)	2	2	B=0.008	B=0.008 to 0.008	Yes	2024	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	A=0.60 B=0.68	A=0.60 to 0.60 B=0.68 to 0.68	Yes	2024	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	A=0.05 B=0.212	A=0.05 to 0.05 B=0.212 to 0.212	Yes	2024	Fertilizer runoff; leaching from septic tanks; sewage; erosion of natural deposits

Other Constituents

*Turbidity (NTU) TT**	Allowable Levels	Highest Single Measurement	Lowest Monthly % Samples Meeting Limit	In Compliance?	Likely Source of Turbidity
Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system.	No more than 1 NTU Less than 0.3 NTU in 95% of monthly samples	A= 0.06 B= 0.16	A= 100 B= 100	A= Yes B= Yes	Soil Runoff

*Unregulated Contaminant Monitoring Rule (UCMR) Sampling

Your drinking water has been sampled for a series of unregulated contaminants. Unregulated contaminants are those that EPA has not yet established drinking water standards, or limits to the amount of contaminant deemed safe for drinking water. The purpose of UCMR is to establish the presence of contaminants and determine if/when they will need to be removed from your drinking water.

LIST IS FOR B, EAST LAUREL WATER DISTRICT. MANCHESTER WATER WORKS HAD NO UCMR DETECTS.

CONTAMINANT (UNITS)	SAMPLE YEAR	AVERAGE LEVEL DETECTED	RANGE OF DETECTED LEVELS
PERFLUOROBUTANOIC ACID (PFBA)	2024	0.0029	0 TO 0.0058

Important Information about Your Drinking Water

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 can 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, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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).

Definitions & Acronyms

Maximum Contaminant Level (MCL): *(required definition)*	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): *(required definition)*	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 contamination.
Treatment Technique (TT):	A required process intended to reduce the level of a contaminant in drinking water.
Action Level (AL):	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions:	State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
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.
Level 2 Assessment:	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.