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.

Lebanon Water Works Co. Water Quality Report 2021

This report is designed to inform the public about the quality of water and services provided on a daily basis. Our commitment is to provide a safe, clean, and reliable supply of drinking water. We want to assure that we will continue to monitor, improve, and protect the water system and deliver a high quality product.

Water System ID: KY0780241
Manager: Daren Thompson
270-692-2491
CCR Contact: Daren Thompson

Mailing address:
120 S. Proctor Knott Avenue
Lebanon, KY 40033

Meeting location and time:
120 S. Proctor Knott Avenue
1st Monday after the 10th each month at 5:00 PM

Lebanon Water Works Company treats water and also purchases some water from Campbellsville. The water is blended within the distribution system.

Lebanon Water Works treats surface water from the Rolling Fork River and Fagan Branch Reservoir. An analysis of the overall susceptibility to contamination for these sources indicates that this susceptibility is generally moderate. Areas of high concern for the Rolling Fork River consist of underground storage tanks, an active landfill, row crops, and bridges and culverts. The areas of high concern at Fagan Branch Reservoir consist of row crops and the possibility for a potential chemical spill, underground storage tanks, and vehicle accidents causing the spilling of hazardous materials. The complete Source Water Assessment Plan is available for review at the Lebanon Water Works office.

Water Purchased From Campbellsville
Campbellsville Municipal Water System treats surface water from Green River Reservoir and City Reservoir in Taylor County. An analysis of the overall susceptibility to contamination indicates that this susceptibility is generally low. The concern for the Green River Reservoir is pollution from row crops, roads, forestland, hay fields, and pastureland presenting a long-term threat to pollution. The City Reservoir is more susceptible to contamination from within its protection zone due to the lower water flow in the stream, larger number of contamination sources, and location within the city of Campbellsville. The complete Source Water Assessment Plan is available for review at the Campbellsville Municipal Water System.

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.

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   Lebanon Water Company

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection		Date of Sample	Violation	Likely Source of Contamination
Microbiological Contaminants								
E.coli Bacteria % positive samples	0%	0	1	N/A		2021	Yes	Human and animal fecal waste
Barium [1010] (ppm)	2	2	0.026	0.026 to	0.026	Feb-21	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	0.79	0.79 to	0.79	Feb-21	No	Water additive which promotes strong teeth
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	3.2 (lowest average)	1.71 to (monthly ratios)	4.80	2021	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	1.31 (highest average)	0.33 to	1.94	2021	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	29 (high site average)	11 to (range of individual sites)	44	2021	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	43 (high site average)	12 to (range of individual sites)	72	2021	No	Byproduct of drinking water disinfection.
Household Plumbing Contaminants								
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.0471 (90th percentile)	0.0019 to	0.0588	Aug-19	No	Corrosion of household plumbing systems
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	2 (90th percentile)	0 to	8	Aug-19	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	0.083	100	No	Soil runoff

	Average	Range of Detection	
Fluoride (added for dental health)	0.7	0.59 to	0.97
Sodium (EPA guidance level = 20 mg/L)	5.5	5.5 to	5.5

Regulated Contaminant Test Results   Campbellsville Water and Sewer System

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-21	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	0.71	0.71 to	0.71	Mar-21	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	0.66	0.66 to	0.66	Mar-21	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Atrazine [2050] (ppb)	3	3	0.22	0.22 to	0.22	Jul-21	No	Runoff from herbicide used on row crops
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.27 (lowest average)	1.00 to (monthly ratios)	1.74	2021	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.

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	0.24	100	No	Soil runoff

Violation 2022-9951037 - One routine monitoring sample we collected in the distribution system on August 19, 2021 tested positive for E. coli bacteria. We took repeat samples and the originally affected sample site tested positive for total coliform bacteria, but not E. coli. We took special samples throughout the distribution system and additional microbial contamination was not found. We believe this issue to be contamination of the sampling apparatus at the original sampling location. Public notification was issued within 24 hours of this incident.

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. During the past year we were required to conduct one assessment. One Level 1 assessment was completed. In addition, we were required to take one corrective action and we completed one action.

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. We had a total coliform-positive repeat sample following an E. coli-positive routine sample. We were required to complete a Level 2 assessment because we found E. coli in our water system. In addition, we were required to take two corrective actions and we completed two of these actions.

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.

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