2018

Mallory Valley Utility District Water Quality Report

Is my drinking water safe?

Yes, your water is safe and our water meets all of the Environmental Protection Agency's (EPA) health standards. Our water provider has conducted tests for more than 57 contaminants that may be present in drinking water. The State and the EPA require us to test our water and report our findings on a regular basis. We are pleased to report that our water passed all required tests. As you'll see in the chart on the back, only 11 contaminants were detected, and of those 11 all were at safe levels. In addition, results of unregulated contaminant analysis are available upon request.

Where does your water come from?

Your water, which is surface water, comes from Harpeth Valley Utility District, which pumps water from the Cumberland River. Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water source to *potential* contamination. The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving this water system. The SWAP Report assesses the susceptibility of untreated water sources to *potential* contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. Water sources have been rated as reasonably susceptible, moderately susceptible or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The Mallory Valley Utility District sources are rated as reasonably susceptible to potential contamination.

An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html or you may contact TDEC at 1-888-891-8332 to obtain copies of specific assessments.

Why are there contaminants in my water?

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).

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.

For more information about your drinking water, please call Kim Newman (615)628-0237.

How can I get involved?

The District's Board of Commissioners and Management Team meet on the last Friday of each month at 8:00 a.m. at the District office, which is located at 465 Duke Drive. Board meetings are open to the public. In order to be heard by the Board, placement on the agenda for the meeting is requested.

The Commissioners of Mallory Valley Utility District serve four year terms. Vacancies on the Board of Commissioners are filled by appointment by the Mayor from a list of three nominees certified by the Board. Decisions by the Board of Commissioners on customer complaints, brought before the Board under the District's customer complaint policy, may be reviewed by the Utility Management Review Board of the Tennessee Department of Environment and Conservation pursuant to Section 7-82-702(7) of Tennessee Code Annotated.

Other information

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 also pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water:

- 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 naturallyoccurring or result from urban stormwater 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 stormwater 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 stormwater 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, EPA and TDEC prescribe 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.

Important health information. Do I need to take special precautions?

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 under-gone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk for infections. These people should seek advice about not only their drinking water, but for food preparation, personal hygiene, and also precautions in handling infants and pets from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Lead in drinking water

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. Mallory Valley Utility District 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. However, the District is required to test for lead every 3 years. If you would like to participate in this free service, please call our office. 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.

Water system security

Following the events of September 2001, we realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities, including treatment plants, pumping stations, tanks, fire hydrants, etc. to (615)628-0237.

Water Quality Data

What does this chart mean?

- MCLG Maximum Contaminant Level Goal, or 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.
- MCL Maximum Contaminant Level, or 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. To understand the possible health effects described for many regulated constituents, 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.
- MRDL- Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.
- MRDLG Maximum Residual Disinfectant Level Goal. 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.
- AL Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- . BDL- Below Detection Level laboratory analysis indicates that the contaminant is not present at a level which can be detected.
- PPM Parts Per Million or Milligrams Per Liter— explained as a relation to time and money as one part per million corresponds to one minute in two years or a single penny in \$10.000.
- PB Parts Per Billion or Micrograms Per Liter explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- NTU Nephelometric Turbidity Unit nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- <u>IT</u> Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.
- AVG Average.

Contaminant	Violation Yes/No	Level Detected	Range of Detection	Date of Sample	Unit Measurement	MC LG	MCL	Likely Source of Contamination
Total Coliform Bacteria	No	1		12/21/17		0	<2 positive samples	Naturally present in the environment
Turbidity ⁴	No	Avg. 0.05	0.03-0.16	2017	NTU	n/a	TT	Soil runoff
Copper ¹	No	90 TH %=1.1		2017	PPM	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	No	Avg. 0.49	0.04-0.81	2017	PPM	4.0	4.0	Erosion of natural deposits; water additive which promotes strong teeth
Lead ¹	No	90 th %=0.1		2017	PPB	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Sodium	No	8.8		9/19/17	PPM	N/A	N/A	Erosion of natural deposits; used in water treatment
TTHM Total trihalomethanes	No	Avg. 37.88	0.00- 62.00	2017	PPB	n/a	80	By-product of drinking water chlorination
THAA Total Haloacetic Acids	No	Avg. 23.29	0.0-33.50	2017	PPB	N/A	60	By-product of drinking water disinfection
Total Organic Carbon ²	No	1.37 MAX	1.03-1.37	2017	PPM	N/A	TT	Naturally present in the environment
Chlorobenzene ⁵	No	.586		2017	PPB	100	100	Stormwater runoff
Contaminant	Violation Yes/No	Level Found	Range of Detection	Date of Sample	Unit Measurement	MR DL G	MRDL	Likely Source of Contamination
Chlorine	No	Avg. 1.4	0.1-2.2	2017	PPM	4	4	Water additive used to control microbes
Miscellaneous Compounds	Violation Yes/No	Level Found	Range of Detection s	Date of Sample	Unit Measurement	MR DL G	MRDL	Likely Source of Contamination
Alkalinity	No	90 AVG	71-123	2017	PPM	N/A	N/A	The capacity of water to naturalize acids
$Hardness^3$	No	104 AVG	86-130	2017	PPM	N/A	N/A	Erosion of natural deposits

¹During the most recent round of Lead and Copper testing, 0 out of 30 households sampled contained concentrations exceeding the action level.

²We have met all treatment technique requirements for Total Organic Carbon removal.

³ Equivalent to 5.8 grains per gallon of hardness.

⁴Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

⁵ HVUD's monitoring of source water in 2017 showed the presence of cryptosporidium in 2 of 6 samples. No cryptosporidium detections in finished water.