

W a t e r Q u a l i t y D a t a

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.
- **MRDL**: Maximum Residual Disinfectant Level or MRDL: 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.
- **Below Detection Level (BDL)** - laboratory analysis indicates that the contaminant is not present at a level that can be detected.
- **Non-Detects (ND)** - laboratory analysis indicates that the contaminant is not present.
- **Parts per million (ppm) or Milligrams per liter (mg/l)** -- 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.
- **Parts per billion (ppb) 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.
- **RTCR** - Revised Total Coliform Rule. This rule went into effect on April 1, 2016 and replaces the MCL for total coliform with a Treatment Technique Trigger for a system assessment.
- **TT** - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

Contaminant	Violation Yes/No	Level Detected	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (RTCR)	No	0		2017		0	TT Trigger	Naturally present in the environment
Finished Water Turbidity ¹	No	0.25	0.02-0.25	Daily 2017	NTU	N/A	TT	Soil runoff
Copper ²	No	90 th %=0.21		2017	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (KUB)	No	0.79 0.58 Avg.	0.45-0.68	2017	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Fluoride (Shady Grove)	No	0.90 0.47 Avg.	0.05-0.09	2017	Ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead ²	No	90 th %=4.0		2017	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	No	1.54		2017	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium	No	11.0		2017	ppm	N/A	N/A	Erosion of natural deposits; used in water treatment
TTHM ³ [Total trihalomethanes]	No	65.28 Avg.	10.0-104	Quarterly 2017	ppb	N/A	80	By-product of drinking water chlorination
Haloacetic Acids (HAAs)	No	49.63 Avg.	5.49-83.10	Quarterly 2017	ppb	N/A	60	By-product of drinking water disinfection.
Total Organic Carbon ⁴	No			2017	ppm	TT	TT	Naturally present in the environment
Barium	No	0.027		2017	ppm	N/A	2.0	Discharge of drilling wastes, metal refineries, erosion of natural deposits.
Contaminant	Violation Yes/No	Level Detected	Range of Detection	Date of Sample	Unit Measurement	MRDLG	MRDL	Likely Source of Contamination
Chlorine	No	2.25 Avg.	1.10-2.8	Daily 2017	ppm	4	4	Water additive used to control microbes.

¹100% of our samples were below the turbidity limit. Turbidity is a measurement of the cloudiness of water.

²During the most recent round of Lead and Copper testing, only 1 out of 35 households sampled contained concentrations exceeding the action level. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791). ³ While your drinking water meets EPA's standard for trihalomethanes, it does contain low levels. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

⁴ We have met all treatment technique requirements for Total Organic Carbon removal.

Shady Grove Utility District Water Quality Report for 2017

Is my drinking water safe?

Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 80 contaminants that may be in drinking water. As you'll see in the chart on the back, we only detected 11 of these contaminants. We found all of these contaminants at safe levels.

What is the source of my water?

Your water, which is treated surface water and groundwater is purchased from Jefferson City and KUB. 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 Shady Grove 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 scores and the overall TDEC report to EPA can be viewed online at <https://www.tn.gov/environment/article/wr-wq-source-water-assessment> or you may contact the Water System to obtain copies of specific assessments. A wellhead protection plan is available for your review by contacting the City of Jefferson City at 865.473.6617.

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 Mike Jones at 865.397.3790.

How can I get involved?

Our Water Board meets on the second Monday of each month at 4:00 p.m. at our office, 830 Hwy 139, Dandridge. Please feel free to participate in these meetings. The Commissioners of Shady Grove Utility District serve four year terms. Vacancies on the Board of Commissioners are filled by appointment by the Jefferson and Sewer County Mayors from a list of three nominations certified by the Board of Commissioners to the County Mayors to fill a vacancy. Decisions by the Board of Commissioners 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 the Tennessee Code Annotated.

Is our water system meeting other rules that govern our operations?

The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met all of these requirements. Results of unregulated contaminant analysis are available upon request. We want you to know that we pay attention to all the rules.

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 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.

CROSS-CONNECTION EDUCATION

Over the next few months, the warm weather will bring people outdoors to work in their yards and gardens and begin getting swimming pools ready. The *Shady Grove Utility District* would like to ensure that our customers are aware of the dangers associated with these activities. An ordinary **garden hose** is a common way to contaminate a water supply when the hose is submerged in any liquid or attached to certain devices used to spray pesticides or herbicides. This forms a **cross connection**. A cross connection is a situation where a possible source of contamination is directly linked to our public water system. If the end of your hose is connected to a chemical container, swimming pool or other contaminant during a water main break or fire, the substance can be siphoned back into the water system. This condition, known as **back siphonage**, could cause a public health hazard. Devices are available to prevent this problem; however the best solution is to always be careful how you use your water hose.

Please help us provide a safe supply of water to all of our customers. Remember, never place your water hose in anything you would not want to drink. For more information on cross connections and how to protect against them, call our office at 865-397-3790.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring 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 chemicals, including synthetic and volatile 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 the Tennessee Department of Environment and Conservation 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. Our water treatment processes are designed to reduce any such substances to levels well below any health concern.

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 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 not only their drinking water, but food preparation, personal hygiene, and 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. The Shady Grove 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. 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/lead/protect-your-family%23water%23water>

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 397-3790.

Pharmaceuticals In Drinking Water

Flushing unused or expired medicines can be harmful to your drinking water. Learn more about disposing of unused medicines at <https://www.tn.gov/environment/article/sep-unwanted-pharmaceuticals>