

City of Millington Annual Drinking Water Quality Report-2019

Is my drinking water safe?

Yes, Millington's water meets all of EPA's health standards. We test for over 70 possible contaminants. As you can see in this report, we detected 6 contaminants and found all of those contaminants at safe levels.

What is the source of my water?

Your drinking water comes from a groundwater source supplied by a total of 6 wells. We have 4 main wells that pump water from the Fort Pillow Aquifer. We also have 2 stand-by wells that pump from the Memphis Sand Aquifer if they are ever needed. 4 of these wells are located in the area of the North Treatment Plant located at 7926 Church Street. 2 of these wells are located in the area of the South Treatment Plant located at 5041 Waycross.

We are working hard to protect your drinking water source from contamination. 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 water to 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 (high), moderately susceptible (moderate), or slightly susceptible (low) based on geologic factors and human activities in the vicinity of the water source. The City of Millington Water System sources are rated as **moderately** 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 Tim Laird at the City of Millington Water Plant to obtain copies of specific assessments.

We have developed a wellhead protection plan that has been approved by the State. If you have any questions about this plan, please do not hesitate to call Tim Laird at 873-4956. Tim can be reached at this number Monday thru Friday 7:00 am to 4:00 pm.

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 EPA's Safe Drinking Water Hotline at 1-800-426-4791.

For more information about your drinking water, please feel free to call Tim Laird at 873-4956.

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

How can I get involved?

Please feel free to call us any time during regular operating hours with your questions and concerns.

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 always met all of these requirements. We want you to know that we pay attention to the rules. In 2017 the City of Millington Water System was inspected and in accordance with the Guidance for Rating a Public Water Supply System, this facility received a numerical rating of **98**, placing it among the State's **"Approved"** water supplies. The operators at the Millington Water Plants are encouraged to be Certified by the State to maintain safe drinking water for you the customer. We also have ongoing programs that include backflow preventer testing and issuing special use discharge permits.

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 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 at 1-800-426-4791.

Water Quality Data

Contaminant	MCLG in CCR units	MCL in CCR Units	Level found in CCR Units	Range of detections	Violation	Date of sample	Typical source of Contaminant
Microbiological Contaminants							
Total Coliform Bacteria	0	> 1	0	N/A		12-18-19	Naturally present in the environment
Inorganic Contaminants							
Fluoride	4	4 ppm	0.66 ppm	0.41-0.87	NO	11-20-19	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Copper	1300 ppb	AL = 1300 ppb	161 ppb		NO	7-17	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	0	AL = 15 ppb	BDL ppb		NO	7-17	Corrosion of household plumbing systems; Erosion of natural deposits
Sodium	N/A	N/A	41		NO	5-10-18	N/A
Beryllium	4	4 ppb	BDL ppb		NO	10-5-12	Discharge from metal refineries and coal-burning factories, electrical, aerospace, and defense industries.
Thallium	0.5 ppb	2 ppb	BDL ppb		NO	10-2-12	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
Unregulated Volatile Organic Contaminants							
Chloroform	N/A	N/A	2.3 ppb		NO	9-4-19	N/A
TTHMS Total Trihalomethanes		80 ppb	30.3 ppb		NO	9-4-19	By-product of drinking water chlorination
HaloAceticAcids	N/A	60 ppb	4.8 ppb		NO	9-4-19	By-product of drinking water disinfection
Chlorine	MRDLG = 4	MRDL = 4	<4		NO	Tested daily	Water additive used to control microbes

About the data: We monitor for some contaminants less than once per year, and for those contaminants, the date of the last sample is shown in the table.

We had 0 sites out of a total of 20 sites sampled to exceed the copper action level.
 We had 0 sites out of a total of 20 sites sampled to exceed the lead action level.

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. For additional information call the Safe Drinking Water Hotline at 1-800-426-4791.

During the year 2017 we were required to conduct one Level 1 Assessment. One Level 1 Assessment was completed. In addition, we were required to take one corrective action and we completed the one corrective action. This action consisted of collecting repeat samples from the coliform positive site along with sites upstream and downstream of this site. After repeat sampling, the primary site along with all repeat sample sites tested negative for coliform bacteria proving the water was safe to drink.

Abbreviations AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

PPB: Parts Per Billion or micrograms per liter. Explained in terms of money as one penny in \$10,000,000.

PPM: Parts Per Million or milligrams per liter. Explained in terms of money as one penny in \$10,000.

MRDL: Maximum Residual Disinfectant Level, or the highest level of 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, or 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.

BDL: Below Detection Limit

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.

Iron: Iron occurs naturally in our raw water and occasionally accumulates in the distribution system. Iron shows up as "red" or "rusty" water at your tap. Although you do not want to drink water that is not clear, iron is not considered to be a hazard to your health. We test for iron daily and it is usually around 0.18 ppm. The aesthetic limit for iron is 0.3 ppm.

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 City of Millington 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>.

Think before you flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. These common contaminants, if not properly disposed, can end up in the source of your drinking water (streams, lakes and groundwater). Keep medications out of Tennessee's waterways by disposing in one of the permanent pharmaceutical take back bins. There are nearly 100 take back bins located across the state, to find a convenient location please visit <https://tdeconline.tn.gov/rxtakeback/> The City of Millington Police Department now has a pharmaceutical take back bin located at 7950 Memphis Avenue. There are about 17 take back bin locations in Shelby County.

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.
- 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 insure 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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

We at the City of Millington Water Department work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.