Sweetwater Utilities Board
Water Quality Report-2015

Is my drinking water safe?

We're pleased to present to you this year's Annual Water Quality Report. This is the fourteenth installment of an annual report to you, the customer, informing you about the quality of drinking water and services that we deliver to you every day. This report is available at our office or at www.sweetwaterutilities.com. Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of your water is safe and meets federal and state requirements.

What is the source of my water?

Our surface water source is Sweetwater Creek and Cannon Spring. Both water sources are combined at the treatment plant. Customers on the east side of our service area also receive water from Tellico Area Services System. The Tennessee Dept. of Environment has prepared a Source Water Assessment Program Report for the untreated water sources. The 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 and slightly susceptible. Our rating is reasonably susceptible. An explanation of the Tennessee Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed at www.tn.gov/environment/dws/dwassess.shtml or you may contact the water system to obtain copies of specific assessments.

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).

All sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, 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 of source water may include:

Microbial contaminants, such as viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
Inorganic compounds, 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 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 compounds, 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 Dept. 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. The table on the following page shows the detected substances in your water. All of the detected substances were well below the maximum limits, set by EPA and the State of Tennessee.

For more information about your drinking water, please call us at (423) 337-5081.

How can I get involved?

Our regularly scheduled board meetings are held on the last Monday of every month at 5:30 P.M. in the Sweetwater Utilities Board conference room located at 101 Oak Street.

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

We have a wellhead protection plan available from our office that provides more information such as potential sources of contamination.

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 their personal sanitation, food preparation, handling infants and pets, and drinking water 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).

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.
- MRDLG: Maximum residual disinfectant level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health.
- 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.

☐Discretionary language regarding the use of averages to report levels of some contaminants.

Substance (Units)	MCLG	MCL	Level found	Range of detections	Violation	Date of sample	Typical source of Substance
Microbiological Contaminants							
Total Coliform Bacteria	0	1 Positive Sample	0	0	No	Daily 2015	Naturally present in the environment
Inorganic Contaminants							
Copper *	1.3	AL=1.3 ppm	90th%=.075 ppm		No	Aug-2014	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Fluoride	4	4 ppm	0.7 avg.	0.27 - 1.2 ppm	No	Daily 2015	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead*	0	AL=15 ppb	90th%=1.0 ppb		No	Aug 2014	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate (as Nitrogen)	10	10 ppm	1.6	0.143-1.6 ppm	No	1-5-2015	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	n/a	n/a	5.95 ppm	2.8-5.95 ppm	No	6-5-2015	Erosion of natural deposits
Turbidity	n/a	TT (95% <0.3 NTU)	0.28 avg.	0.04 - 0.52 ntu	No	Continuously 2015	Soil runoff
Organic Contaminants							
Total Organic Carbon**	TT	TT	0.79 ppm	0.588-0.99 ppm	No	Quarterly 2015	Naturally present in the environment
Total Haloacetic Acids		60 ppb	40 ppb avg.	10 – 60 ppb	No	Quarterly 2015	By-product of drinking water chlorination

Trihalomethanes		80 ppb	60 avg. ppb	20– 100 ppb	No	Quarterly 2015	By-product of drinking water chlorination
Substance (Units)	MRDLG	MRDL					
Chlorine (ppm)	MRDLG =4	MRDL=4	1.51 ppm	0.9 – 2.11 ppm	No	Daily 2015	Water additive for disinfection

*We had zero sites out of twenty (23) sites exceed the action level of lead or copper.
** We met the Treatment Technique requirement for Total Organic Carbon.

Turbidity: Turbidity does not present any risk to your health. We monitor turbidity, which is a measure of the cloudiness of water, because it is a good indicator that our filtration system is functioning properly.
Abbreviations: PPB: parts per billion or micrograms per liter. PPM: parts per million or milligrams per liter.
N/A: not applicable. NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water. MFL: million fibers per liter, used to measure asbestos concentration. AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water. BDL: Below Detection Limit.
About the data: Most of the data presented in this table is from testing done between Jan. 1- Dec.31, 2015. 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.

The Third Unregulated Contaminant Monitoring Rule (UCMR3)

The 1996 amendments to the Safe Drinking Water Act (SWDA) require that once every five years, the U.S. Environmental Protection Agency (EPA) issue a new list of no more than 30 unregulated contaminants to be monitored by public water systems (PWSs). The Unregulated Contaminant Monitoring Rule provides EPA and other interested parties with scientifically valid data on the occurrence of contaminants in drinking water. These data serve as a primary source of occurrence and exposure information that the agency uses to develop regulatory decisions. Sweetwater Utilities Division of Water is participating in UCMR3 and provides the highest results of the testing below:

Analyte ID#	Analyte	Method	MRL*	Result	Units	Preparation Date	Analyzed Date	EEA ID#
1020	Chromium	200.8	0.2	0.3	ug/L	6/22/15	6/23/15	3264437
1081	Cobalt	200.8	1.0	<1.0	ug/L	6/22/15	6/23/15	3264437
1084	Molybdenum	200.8	1.0	<1.0	ug/L	6/22/15	6/23/15	3264437
1051	Strontium	200.8	0.3	36	ug/L	6/22/15	6/23/15	3264437
1088	Vanadium	200.8	0.2	0.3	ug/L	6/22/15	6/23/15	3264437
1080	Chromium, VI	218.7	0.03	0.21	ug/L	----------	6/23/15	3264440
1007	Chlorate	300.1	20	140	ug/L	----------	6/23/15	3264439

MRL stands for Modified Reporting Limit; ug/L means microgram per liter or parts per billion; EEA means Eurofins Eaton Analytical.

Required Consumer Confidence Report statement addressing 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. Sweetwater Utilities Board 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 your potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using the 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*.

If you would like to learn more about Lead in Drinking Water, go to the following On-Line Resources

U.S. Environmental Protection Agency
Lead Hotline – The National Lead Information Center
http://www.epa.gov/lead/pubs/nlic.htm

U. S. Environmental Protection Agency
“Lead in Drinking Water”
http://epa.gov/safewater/lead/index.html

U. S. Centers for Disease Control and Prevention
“Lead and Drinking Water From Private Wells”
http://www.cdc.gov.ncidod/dpd/healthywater/factsheets/lead.htm

National Center for Environmental Health
“Lead in Water: Questions and Answers”
http://www.cdc.gov/nceh/lead/faq/leadinwater.htm

Mayo Clinic
“Lead Poisoning”
http://www.mayoclinic.com/health/lead-poisoning/FL00068