



# WATER AUTHORITY OF DICKSON COUNTY

## WATER QUALITY REPORT

### 2017

#### Is my drinking water **SAFE**?

Yes, your drinking water is safe. Water treated and distributed by the Water Authority of Dickson County (WADC) meets all the Environmental Protection Agency's (EPA) health standards. In 2017, we conducted tests for more than 80 contaminants that might be found in drinking water. As you will see on the attached chart, there were only 10 contaminants found in our water supply, and they were at levels determined safe by the EPA. The State and the EPA also require that we test our water and report the findings on a regular basis to ensure that safety and quality standards are achieved. The WADC always meets each of these requirements. We continually strive to maintain and improve the water you drink because our families drink it, too.

#### Where does our **WATER** come from?

Your water, surface water, comes either from the Piney River, Turnbull Creek, or 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 supplies to contamination. WADC, along with 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 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, moderately, or slightly susceptible, based on geologic factors and human activities in the vicinity of the water source. The WADC system has been rated as reasonably susceptible to potential contamination. An explanation of Tennessee's SWAP, the Source Water Assessment Summaries, susceptibility scorings and the overall TDEC report can be viewed online at <http://tn.gov/environment/dws/dwassess.shtml>, or you may contact WADC to obtain copies of specific assessments. A source water assessment has been developed and is available for review during normal business hours at WADC's Dickson Water Treatment Plant located at 206 West Chestnut Street.

#### Is the water system **SECURE**?

Following the events of September 11, 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, tanks, hydrants, etc. to (615) 441-9511.

#### What are the **HEALTH** impacts of our water?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people can be particularly at risk for infections. This includes those undergoing chemotherapy, people who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly and infants. These people should seek advice from a health care provider about their drinking water. More information about EPA guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* or other microbial contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline, 800-426-4791.

#### 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. Community water systems are required to disclose the detection of contaminants. However, bottled water companies are not required to comply with this regulation. The presence of contaminants does not necessarily indicate that water poses a health threat. Because all water contains dissolved contaminants, occasionally your water may exhibit slight discoloration. We strive to maintain the standards to prevent this, and we work around the clock to provide top quality water to every tap. We ask our customers to help us protect our water sources, which are the heart of our community, our way of life, and our children's future. More information may be obtained by calling the EPA Safe Drinking Water Hotline, 800-426-4791.

The sources of drinking water (both bottled and tap 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 include:

- Microbial contaminants, such as viruses and bacteria, which may come from wastewater treatment plants, septic systems, agricultural operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or from 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 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.

***Cryptosporidium***: A microbial parasite which is found in surface water throughout the United States. Although *Cryptosporidium* can be removed by filtration, the most commonly used filtration methods cannot guarantee removal. Monitoring our raw water source indicated the presence of *Cryptosporidium* in 2 out of 36 samples tested. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals are able to overcome the disease within a few weeks. However, immuno-compromised people have more difficulty and are at a greater risk of developing severe, life threatening illness. Immuno-compromised individuals are encouraged to consult their doctors regarding appropriate precautions to take to prevent infection. For more information on *Cryptosporidium*, contact the Safe Drinking Water Hotline (800-426-4791).

**Total Trihalomethanes**: Some people who drink water containing trihalomethanes in excess of the MCL (Maximum Contaminant Level) over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

**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. WADC is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components of individual homes. 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 the water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your tap 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>. During the most recent sampling conducted it was found that none of the 30 WADC representative sites sampled had lead or copper exceeding the respective action levels.

**To understand the possible health effects of many of the contaminants, a person would have to drink two liters of water at the MCL for a lifetime to have a one in one million chance of having the described health effects.**

## About the **DATA**

The data presented in the following table represents testing done between January 1, 2017 and December 31, 2017. WADC monitors for some contaminants less than once per year. For those contaminants the date of the last sample is shown in the table.

CONTAMINANT	VIOLATION YES/NO	LEVEL DETECTED	RANGE OF DETECTIONS	DATE OF SAMPLE	UNIT OF MEASURE	MCLG	MCL	LIKELY SOURCE OF CONTAMINANT
Turbidity	No	0.20 MAX	0.03-0.20	2017	NTU	N/A	TT	Soil runoff.
Total Organic Carbon	No	1.66 MAX	0.50-1.66	2017	ppm	N/A	TT	Soil runoff.
Total Coliform Bacteria	No	0	0	2017		0	<2	Normally present in environment.

### INORGANIC CONTAMINANTS

Chlorine	No	2.31 AVG	0.49-3.80	2017	ppm	4.0	4.0	Additive used to control microbes.
Fluoride	No	0.68 AVG	0.02-0.97	2017	ppm	4.0	4.0	Erosion of natural deposits. Additive promotes strong teeth.
Nitrate	No	0.36 MAX	0.10 – 0.36	10/03/17	ppm	10.0	10.0	Soil runoff from fertilizer.
Sodium	No	11.0 MAX	4.8 – 11.0	6/07/17	ppm	N/A	N/A	Erosion of natural deposits.

### VOLATILE CONTAMINANTS

Total Trihalomethanes	No	34 AVG	15-75	2017	ppb	80 ppb	80 ppb	By-product of chlorination.
Haloacetic Acid	No	38 AVG	18-70	2017	ppb	60 ppb	60 ppb	By-product of chlorination.
Chlorobenzene	No	0.586		08/15/17	ppb	100 ppb	100 ppb	chemical and agricultural factory discharge Storm water runoff

### LEAD AND COPPER

Lead	No	0.5*		2017	ppb	0	AL-15	Corrosion of plumbing. Erosion of natural deposits.
Copper	No	0.165*		2017	ppm	1.3	AL-1.3	Corrosion of plumbing. Erosion of natural deposits. Leaching of wood preservatives.

### \*90th percentile

**AL - Action Level** – The concentration of contaminant which, when exceeded, triggers treatment or other requirements that the water system must follow.

**BDL - Below Detection Limit**

**MCLG - Maximum Contaminant Level Goal** - The level of a contaminant in drinking water below which there is no known or expected risk to health.

**MCL - Maximum Contaminant Level** - The highest level of a contaminant that is allowed in drinking water.

**MDRL - Maximum Disinfection Residual Level Goal** - The level of drinking water disinfection below which there is no known or expected risk to health.

**MDRL - Maximum Disinfection Residual Level** - The highest level of a disinfectant allowed in drinking water.

**N/A - Not Applicable**

**NTU - Nephelometric Turbidity Unit** - A measure of the clarity of water.

**PPB - Part Per Billion** (e.g., one penny in ten million dollars)

**PPM - Part Per Million** (e.g., one penny in ten thousand dollars)

**TT - Treatment Technique** - A required process intended to reduce the level of a contaminant in drinking water.

**Turbidity** - Does not present any risk to your health. WADC monitors turbidity, the measure of the cloudiness of water, because it is a good indicator that the filtration system is functioning properly. WADC met the treatment technique for turbidity with 100% of monthly samples below the limit of 0.3 NTU.

**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.

**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.

The Water Authority of Dickson County Board of Commissioners meets on the second Monday of each month at 6:00 pm at our 101 Cowan Road facility. Please feel free to participate in these meetings. WADC's Board is comprised of two members appointed by the Dickson County Mayor, two members appointed by the Mayor of Dickson, and one member appointed by the other four Board members. The five members serve staggered terms. All governmental powers of WADC are exercised by the WADC Board of Commissioners. All decisions by the Board on customer complaints may be reviewed by the Utility Management Review Board pursuant to Tennessee Code Annotated, Section 7-82-702(7).

**For more information about your drinking water, please call Jimmy Murphy at 615-441-9511.**

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