

# Water Management Department

## City of Franklin, Tennessee

### 2016 WATER QUALITY REPORT

Dear Customer: We are pleased to present a summary of the quality of the water provided to you during the past year. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence" report to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. The City of Franklin, Tennessee, Water Management Department is committed to providing you with the safest and most reliable water supply possible. The City of Franklin takes great pride in our community and serving our customers.

We encourage public interest and participation in our community's decisions affecting drinking water. We regularly schedule meetings of the Board of Mayor and Aldermen the second and fourth Tuesday of each month, in the City Hall Board Room, located at 109, 3rd Avenue South, Franklin, TN. The public is certainly welcome to attend these meetings. Please call the City Administrator's office at 791-3217, prior to attending any meeting to ensure there has been no change in the schedule. Find out more about the City of Franklin, Tennessee, Water Management Department, on the Internet at [www.franklintn.gov](http://www.franklintn.gov).

#### Water Source – Where Our Water Comes From

We supply our customers with surface water drawn from the Harpeth River, stored in our 114 million gallon reservoir and treated at our Water Treatment Facility, located at 838 Lewisburg Pike, in Franklin. In addition to the water we treat at the Lewisburg Pike treatment facility, we purchase water from the Harpeth Valley Utility District. The Harpeth Valley Utility District treats water from the Cumberland River and pumps the treated water to Franklin, which is blended with the City's treated water. Sampling results for Harpeth Valley Utility District are noted in the enclosed Water Analysis table as "HV." The Tennessee Department of Environment and Conservation 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, or slightly susceptible, based on geological factors and human activities in the vicinity of the water source. 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.state.tn.us/environment/dws/dwassess.shtml](http://www.state.tn.us/environment/dws/dwassess.shtml), or you may contact Russell Sullivan at 615-791-3260.

#### *Water Analysis - Is Your Drinking Water Safe?*

#### How Do I Read The Following Chart?

The City of Franklin daily tests its water quality being delivered to our customers. This table lists those substances which were detected in the water we deliver. It is based upon tests conducted in the year 2016. Terms used in the Water-Quality Table and in other parts of this report are defined here.

#### Key to Table

<p><b>AL</b> = Action Level  <b>MFL</b> = million fibers per liter  <b>Turbidity</b> = a measure of cloudiness of water  <b>PCIL</b> = picocuries per liter (a measure of radioactivity)  <b>TT</b> = Treatment Technique  <b>BDL</b> = Below the Detection Level (Undetectable)  <b>MDRL</b> = 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.  <b>MDRLG</b> = the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of use of disinfectants to control microbial contaminants</p>	<p><b>MCL</b> = Max. Contaminant Level (The highest level allowed in the water)  <b>MCLG</b> = Maximum Contaminant Level Goal  <b>NTU</b> = Nephelometric Turbidity Units  <b>PPM</b> = parts per million, or milligrams per liter (mg/l)  <b>PPB</b> = parts per billion, or micrograms per liter (µg/l)  <b>NA</b> = Not Applicable</p>
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Parameter/ Contaminant	Violation	Date Tested	Unit	MCL	MCLG	Level Found	Range	Major Sources
TURBIDITY	NO	Daily	NTU	TT	NA	0.11 <sup>1</sup> ----- 0.06 <sup>1</sup> HV	0.05 - 1.44 ----- 0.03 - 0.28 HV	Soil Runoff
TOTAL ORGANIC CARBON (TOC)	NO	Quarterly in 2016	PPM	TT	NA	2.8 max*** ----- 1.67 max HV	1.73 – 2.8 ----- 1.26/1.67 HV	Naturally present in the environment
TOTAL COLIFORM JANUARY / MARCH 2016	NO ----- NO (HV)	2016 70 Samples per Month	NA	Presence in 5% of Samples	0	0% Positive** During January/ March 2016	NA ----- NA	Naturally present in the environment
TOTAL COLIFORM APRIL / DECEMBER 2016	NO ----- NO (HV)	2016 70 Samples per Month	NA	Presence in 5% of Samples	0	4% Positive** During October 2016	NA ----- NA	Naturally present in the environment

<b>INORGANIC CONTAMINANTS</b>								
CHLORINE	NO	2016	PPM	4.0 (MDRLG)	4.0 (MDRL)	2.2 <sup>1</sup>	.10 – 3.0	Water additive used to control microbes
FLUORIDE	NO	Quarterly ----- Quarterly	PPM	0.7	0.7	.56 <sup>1</sup> ----- 0.15 <sup>1</sup> HV	.19 – .85 ----- BDL- 0.73 HV	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	NO	2/11/16 ----- 10/11/16	PPM	10.0	10.0	BDL ----- .31 HV	NA	Soil runoff from fertilizer
SODIUM	NO	5/11/16 ----- 9/8/16	PPM	NA	NA	16.7 ----- 13.6 HV	NA ----- NA	Erosion of Natural Deposits
<b>LEAD and COPPER</b>								
COPPER	NO	2015	PPM	AL=1.3	0.0	0.068*	NA	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	NO	2015	PPB	AL=15	0	1.4 *	NA	Corrosion of household plumbing systems; Erosion of natural deposits
<b>VOLATILE CONTAMINANTS</b>								
TOTAL **** TRICHALOMETHANE	NO	Quarterly	PPB	80	0	39 <sup>1</sup>	16 - 74	By-product of drinking water Chlorination
TOTAL ***** HALOACETICACID	NO	Quarterly	PPB	60	0	25 <sup>1</sup>	15 - 44	By product of drinking water Chlorination
<b>MISCELLANEOUS COMPOUNDS</b>								
ALKALINITY	NO	2016	PPM	NA	NA	108 <sup>1</sup>	38 - 196	The capacity of water to neutralize acids
HARDNESS	NO	2016	PPM	NA	NA	132 <sup>1</sup>	68 - 222	Erosion of natural deposits

**TABLE FOOTNOTES:**

- \*\*\*\* 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 system and may have an increased risk of getting cancer.
- \*\*\*\*\* Some people who drink water containing Haloacetic Acids in excess of the MCL over many years may have an increased risk of getting cancer.
- \*\*\* We met the treatment technique requirement for Total Organic Carbon.
- \*\* Based on our population, 885 samples were collected of which 6 were positive.
- \* 90<sup>th</sup> percentile. Copper and Lead samples were drawn from 31 individual homes of which 0 contained levels exceeding the action level.
- + We met the treatment technique requirements for turbidity with greater than 95% of monthly samples less than 0.3 NTU.
- HV** Results of Harpeth Valley Utility District water sampling.
- 1** Average Measurement.

**Additional Health 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 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:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can, also, come from gas stations, urban storm water runoff and septic systems.

(E) 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 prescribes regulations which limit the amount of certain contaminants in water provided by public water systems.

### **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. The City of Franklin 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 thirty seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may 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>

### **IOCs/Sec**

IOCs/Sec, also known as inorganic and secondary compounds, are tested by collecting one sample and testing that sample for all the IOCs and secondary's. IOCs include arsenic, barium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, antimony, beryllium, thallium and secondaries include aluminum, chloride, copper, iron, manganese, silver, sulfate, mbas, zinc, odor, and total dissolved solids.

FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than is 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 drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

