# **Water Management Department**

# City of Franklin, Tennessee 2014 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.

## 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, 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 2014. Terms used in the Water-Quality Table and in other parts of this report are defined here.

#### **Key to Table**

= Action Level MCL = Max. Contaminant Level (The highest level allowed in the water) MFL MCLG Maximum Contaminant Level Goal million fibers per liter Turbidity = a measure of cloudiness of water Nephelometric Turbidity Units PCI/L picocuries per liter (a measure of radioactivity) PPM = parts per million, or milligrams per liter (mg/l) Treatment Technique PPB = parts per billion, or micrograms per liter (μg/l) BDL Below the Detection Level (Undetectable) NA = Not Applicable MDRL 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. MDRLG 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

Parameter/ Contaminant	Violation	Date Tested	Unit	MCL	MCLG	Level Found	Range	Major Sources
TURBIDITY	YES	Daily	NTU	ТТ	NA	0.11 <sup>1</sup>  0.05 <sup>1</sup> HV	1.17- 0.04  0.03 - 0.12 HV	Soil Runoff
TOTAL ORGANIC CARBON (TOC)	NO	Quarterly in 2014	PPM	TT	NA	2.6 max **** 1.60 max HV	1.4 – 2.6 	Naturally present in the environment
TOTAL COLIFORM	NO  NO (HV)	2014 60 Samples per Month	NA	Presence in 5% of Samples	0	2.8% Positive** During August & September 2014	NA  <i>NA</i>	Naturally present in the environment

INORGANIC CONTAMINANTS									
CHLORINE	NO	2014	PPM	4.0 (MDRLG)	4.0 (MDRL)	1.361	.1 – 3.60	Water additive used to control microbes	
FLUORIDE	NO	Quarterly Quarterly	PPM	4.0	4.0	0.52 <sup>1</sup>  0.64 <sup>1</sup> HV	0.01 – 1.27  0.14-0.90 HV	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	
NITRATE	NO	2/12/14 10/22/14	PPM	10.0	10.0	BDL  .36 HV	NA	Soil runoff from fertilizer	
SODIUM	NO	5/14/14  9/10/14	PPM	NA	NA	14  12 HV	NA  <i>NA</i>	Erosion of Natural Deposits	
LEAD and COPPER									
COPPER	NO	2014	PPM	AL=1.3	0.0	0.068*	NA	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	
LEAD	NO	2014	PPB	AL=15	0	1.4 *	NA	Corrosion of household plumbing systems; Erosion of natural deposits	
VOLATILE CONT	VOLATILE CONTAMINANTS								
TOTAL TRIHALOMETHANE	NO	Quarterly	PPB	80	0	30 <sup>1</sup>	7 - 47	By-product of drinking water chlorination	
TOTAL HALOACETICACID	NO	Quarterly	PPB	60	0	18 1	7 – 40	By product of drinking water Chlorination	

#### TABLE FOOTNOTES:

- \*\*\* We met the treatment technique requirement for Total Organic Carbon.
- \*\* Based on our population, 881 samples were collected of which 10 were positive.
- \* 90th percentile. Copper and Lead samples were drawn from 61 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.

## **Violations**

Our water system violated drinking water standards over the past year. Even though these were not emergencies, as our customers, you have the right to know what happened and what we did to correct these situations. We are required to monitor your drinking water for Turbidity and Chlorine on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the compliance period of 1-1-2014/12-31-2014 we did not monitor continuously for Chlorine and Turbidity and therefore cannot be sure of the quality of our source water during that time. On November 27, 2013 a third party consultant performed a calibration of the finished water inline turbidimeter but placed the head of the unit on another body that was not in use. This was not discovered until December 3, 2013. Also during a calibration event on April 8, 2014, the chart recorder for finished water Chlorine residual was left off after calibration was finished. This resulted in the chart not recording for a few hours.

On April 16, 2015 a third party consultant moved our digital chart recorder for turbidity from one location to another. After moving the unit it lost connection to its monitoring computer. While this unit has built in storage, after reconnecting to its monitoring computer the data was lost for the period of April 16, 9:40 am until April 29, at 2:35 pm. The unit was functional; during this time, but no data was saved visual readings were collected every hour during the times listed below.

#### What should I Do?

There is nothing you need to do at this time.

The table below lists the contaminants we did not properly test for during the last year, how often we are supposed to sample for Turbidity and Chlorine how many samples we are supposed to take, how many we took, when samples should have been taken, and the date on which follow-up samples were taken.

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Contaminant	Required Sampling	Number of samples taken	When samples should have	When samples were taken				
	Frequency		been taken					
Turbidity	Every Fifteen Minutes	0	11-27-2013 - 12-3-2013	Grab samples were				
				collected hourly during this				
				time.				
Chlorine	Continuous	Hourly samples were	5-28-2014	5-28-2014				
		inaccurate.						
Turbidity	Every fifteen minutes	Hourly visual and grab	4-16-2015 / 4-29-2015	Samples were taken but the				
		samples were collected.		data was lost due to				
				equipment malfunction.				

#### What is being done?

We have updated our operating procedures for monitoring and recording data to insure it is correct and in the event of an equipment malfunction in the future that the problem is resolved immediately.

#### **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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>

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).

