

# Water Management Department City of Franklin, Tennessee

## 2011 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 water drawn from the Harpeth River 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 our Water Treatment Plant staff at 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 2011. Terms used in the Water-Quality Table and in other parts of this report are defined here.

#### Key to Table

<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	<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
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Parameter/ Contaminant	Violation	Date Tested	Unit	MCL	MCLG	Level Found	Range	Major Sources
TURBIDITY	NO	Daily	NTU	TT	NA	0.14 <sup>l</sup> ----- 0.06 <sup>l</sup> HV	0.95- 0.05 ----- 0.03- 0.19 HV	Soil Runoff
TOTAL ORGANIC CARBON (TOC)	NO	Quarterly in 2011	PPM	TT	NA	4.1 max <sup>***</sup> ----- 1.8 max HV	4.1 – 2.2 ----- 1.2 –1.8 HV	Naturally present in the environment
TOTAL COLIFORM	NO ----- NO (HV)	2011 60 Samples per Month	NA	Presence in 5% of Samples	0	1.1% Positive**	NA ----- NA	Naturally present in the environment

<b>INORGANIC CONTAMINANTS</b>								
CHLORINE	NO	2011	PPM	4.0 (MDRLG)	4.0 (MDRL)	2.4 <sup>1</sup>	3.2 – 0.40	Water additive used to control microbes
FLUORIDE	NO	Quarterly ----- Quarterly	PPM	4.0	4.0	0.61 <sup>1</sup> ----- 0.387 <sup>1</sup> HV	1.63 – 0.02 ----- 0.00-0.65 HV	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	NO	3/9/11 ----- 10/19/11	PPM	10.0	10.0	.45 ----- .46 HV	NA	Soil runoff from fertilizer
SODIUM	NO	8/9/11 ----- 10/19/11	PPM	NA	NA	11.0 ----- 9.6 HV	NA ----- NA	Erosion of Natural Deposits
<b>LEAD and COPPER</b>								
COPPER	NO	12/11	PPM	AL=1.3	0.0	0.68*	NA	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	NO	12/11	PPB	AL=15	0	0.11 *	NA	Corrosion of household plumbing systems; Erosion of natural deposits
<b>VOLATILE CONTAMINANTS</b>								
TOTAL **** TRICHALOMETHANE	NO	Quarterly	PPB	80	0	<sup>1</sup> 58	27 - 138	By-product of drinking water chlorination
TOTAL ***** HALOACETIC ACIDS	YES	Quarterly	PPB	60	0	46 <sub>1</sub>	20 – 86	By product of drinking water Chlorination

**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, 876 samples were collected of which nine 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.

**Violations**

**Monitoring Requirements Not Met for the City of Franklin.**

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 specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the second quarter of 2011 we did not monitor or test for VOCs (Volatile Organic Chemicals) and therefore cannot be sure of the quality of our drinking water during that time.

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 VOCs and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were taken.

Contaminant	Required sampling frequency	Number of samples taken	When Samples should have been taken	When samples were taken
VOCs	1 sample during the 2 <sup>nd</sup> quarter	0	3/1/2011 – 6/30/2011	August 9, 2011

What is being done?

Corrective action was taken through disciplinary action and training.

For more information, please contact Russell Sullivan at (615)550-6958 or 838 Lewisburg Pike Franklin, TN 37064

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

**Haloacetic Acid – Exceeding Maximum Contaminant level for the annual running average for Haloacetic Acids.**

During the first and second quarters of 2011 the Franklin Water Management Department violated the MCL (Maximum Contaminant Level) for Haloacetic Acids (HAAs). Although this situation does not require that you take immediate action, as our customers you have a right to know what happened, what you should do, and what is being done to correct the situation.

During the April 1, 2010 through March 31, 2011 compliance period as well as the July 1, 2010 through June 30, 2011 compliance period the system's running annual average for Haloacetic Acids (HAAs) has been calculated to be 0.061 mg/L. This value exceeds the Maximum Contaminant Level of 0.060 mg/L set for this parameter.

Since this violation the Franklin Water Management Department has implemented some changes. We bought and installed a solar powered raw water circulation system. This helps maintain a better quality of water entering our treatment plant, by reducing Organics in the raw water source. As well as covering outside portions of the treatment process to reduce the exposure of UV rays from the sun, helping to prevent new Organic growth before the disinfection process. These two additions to our plant as well as continually improving our flushing program will help us maintain a lower residual of Haloacetic Acids (HAAs) in our system. We returned to compliance for Haloacetic Acids in the 3<sup>rd</sup> quarter of 2011 with a running annual average of 0.049 mg/L and we remain in compliance.

## **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.

### **VOCs**

VOCs, also known as volatile organic compounds, are tested by collecting one sample and testing that sample for all the VOCs. VOCs are commonly used in industrial and manufacturing processes. VOCs include benzene, carbon tetrachloride, chlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, cis-dichloroethane, trans-dichloroethane, dichloromethane, 1,2-dichloropropane, ethylbenzene, styrene, tetrachloroethylene, toluene, 1,2,4-trichlorobenzene, 1,1-dichloroethylene, 1,1,2-trichloroethane, vinyl chloride, and xylene.

### **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>

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).

