



Spring Hill Water System Water Quality Report 2011

Is my drinking water safe?

Yes, our water meets all of EPA's health standards. We have conducted over 21,000 tests for over 104 contaminants that may be in drinking water. As you'll see in the chart, we only detected 9 of those contaminants, and they were all at safe levels.

What is the source of my water?

Your water, which is surface water, comes from the Duck River. Our goal is to protect our water from all contaminants. The Tennessee Department of Environment and Conservation (TDEC) have prepared a Source Water Assessment Program (SWAP) Report for the water supplies serving this water system. The SWAP Report assesses the susceptibility of public water supplies to *potential* contamination. Water sources have been rated as reasonably susceptible, moderately susceptible or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. A source water assessment by the Spring Hill

Water Department and TDEC has been completed. Your water source has been rated as *low susceptibility* to potential contamination. An explanation of this report can be viewed online at www.tn.gov/environment/dws/dwassess.shtml or you may contact the TDEC at 1-888-891-TDEC to obtain copies of specific assessments.

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 report of any 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 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)

For more information about your drinking water locally, please call Caryl Giles. (931) 489-5791

How can I get involved?

The Spring Hill Board of Mayor and Aldermen meets on the 3rd Monday of every month at Spring Hill City Hall. Please feel free to come and participate in all meetings.

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

The State of Tennessee and Environmental Protection Agency requires us to perform tests and report on our water on a regular basis to insure its safety. We have met all of these requirements. We want you to know that we adhere to all the rules governing drinking water.

Este informe contiene informacion muy importante. Traduscalo o hable con alguien que lo entienda bien.



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 undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk for infections. These people should seek advice about not only their drinking water, but also food preparation, personal hygiene, and precautions in handling infants and pets 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).

Other information

All water, including bottled water, contains some level of dissolved contaminants. The presence of these does not necessarily indicate the water poses a health risk. We strive to maintain the treatment standards to prevent this. Spring Hill Water System employees involved in the treatment and distribution of the drinking water, work around the clock to provide top quality water to every tap. We ask that all of our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Cross Connection

Be aware and never cross connect your safe drinking water with a source that could be contaminated. This includes wells that have not been tested and garden hoses hooked to lawn chemicals. A back-siphonage of water or a faulty valve could allow dangerous chemicals to enter your safe drinking water supply. If you have a well or use chemicals that come in contact with the public's safe drinking water, you must install a backflow prevention device and have it tested annually to insure that it is in proper working condition. A backflow prevention device will separate and not allow your safe drinking water to come into contact with anything unsafe.

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. Spring Hill 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 30 seconds to 2 minutes before using 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>.



City of Spring Hill Water Quality Report - 2011

The data presented in this report is from testing done between January 1, 2011 and December 31, 2011.

Some of the contaminants are monitored less than once per year, for those the date of the last sample is shown on the table

Contaminant	Violation Y/N	Level Detected	Range of Detection	Date of Sample	Units	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (5)	No	2 Pos	-----	2011	----	0	no more than 1/month	Naturally present in the environment
Turbidity	No	0.835*	.026-.835*	2011	NTU	N/A	TT	Soil Runoff
Total Organic Carbon (1)	No	2.0	1.3-2.8	2011	PPM	N/A	TT	Naturally present in the environment
Fluoride	No	.967	.784-.967	2011	PPM	4.0	4.0	Erosion of natural deposits; Water additive that promotes strong teeth and bones; Discharge from fertilizer and aluminum factories
Fluoridation was eliminated from the water supply on September 1, 2011								
Sodium	No	5.00	----	2011	PPM	N/A	N/A	Erosion of natural deposits
Atrazine	No	ND		2011	PPB	3.0	3.0	Runoff from herbicide used on row crops
Nitrate	No	2.32	----	2011	PPM	10	10	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits
Lead (2)	No	ND**	ND	2010	PPM	15	AL=15	Erosion of natural deposits; Corrosion of household plumbing
Copper (2)	No	.04**	ND -.14	2010	PPM	1.3	AL=1.3	Erosion of natural deposits; Corrosion of household plumbing
Total Trihalo-methanes (3)	No	40.6 Average	13.7-97.2	2011	PPB	0	80	By products of drinking water chlorination
Total Haloacetic Acids	No	43.2 Average	14.4-83.9	2011	PPB	0	60	By products of drinking water chlorination
Gross Alpha	No	0.8 Average	1.2-1.6	2004	pCi/L	0	15	Erosion of natural deposits
Radium 226-228	No	0.75 Average	1.0-1.5	2004	pCi/L	0	5	Erosion of natural deposits
Alkalinity	No	120 Average	58-170	2011	PPM	N/A	N/A	Capacity of water to neutralize acids
Hardness (4)	No	134 Average	78-208	2011	PPM	N/A	N/A	Erosion of natural deposits
Disinfectant Residual	Violation Y/N	Level Detected	Range of Detection	Date of Sample	Units	MRDLG	MRDL	Likely Source of Contamination
Chlorine	No	2.96 Average	2.16 – 3.81	2011	PPM	4.0	4.0	Water Additive used to control microbes

* Highest single measurement for turbidity. We met the treatment technique with 99.9% of monthly samples below the turbidity limit of 0.3 NTU.

(1)TOC = Total Organic Carbon; 19.2% Average Reduction Required, 11.1% Lowest Reduction Achieved we met the TT requirements for TOC in 2011.

(2) During the most recent round of lead and copper testing, 0 out of 30 households sampled contained concentrations exceeding the action level.

** 90th percentile

(3) 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.

(4) Average 7.84 grains per gallon (4.56 – 12.16 grains per gallon)

(5) We had two positive Total Coliform sample, one in June of 2011 and one in August 2011. All repeat samples were negative. A total of 394 distribution samples were analyzed in 2011.

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land and 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: Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. Inorganic contaminants, 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 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.

GLOSSARY

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. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Turbidity - does not present any risk to your health. SHWTP monitors turbidity, a measurement of the clarity of water, because it is a good indicator that the filtration system is functioning properly.

PPB - Parts Per Billion or Micrograms per liter (1 ppb = one penny in \$10,000,000 or 1 minute in 2,000 years)

PPM - Parts Per Million or Milligrams per liter (1 ppm = one penny in \$10,000 or 1 minute in 2 years)

N/A - Not Applicable

NTU - Nephelometric Turbidity Units, a measurement of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

TT - Treatment Technique, or a required process intended to reduce the level of contaminants in drinking water.

AL - Action Level, or a concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

pCi/l - Picocurie Per Liter A measurement of radioactivity

MRDL - Maximum Residual Disinfectant Level 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.

MRDLG - Maximum Residual Disinfectant Level Goal The level of a drinking water disinfectant below which there is no known or expected risk to health. MCLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

BDL - Below Detection Limit **ND** – Non Detect