

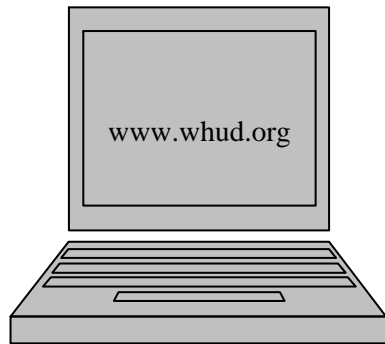
## Why are there contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. 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 EPA's Safe Drinking Water Hotline at 1-800-426-4791.

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, 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 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 storm water 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 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 that 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.



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visit our Web site.



3303 Highway 31W  
P.O. Box 608

## Water Quality Report Enclosed

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## Other Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons; such as persons 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 and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Our drinking water meets EPA standards for trihalomethanes. The EPA establishes Maximum Contaminant Levels (MCLs) using the assumption that if most people drink 2 liters of water containing disinfection byproducts in excess of the MCL every day for 70 years, then 1 person in 10,000 may have an increased risk of cancer. 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. More information about contaminants such as trihalomethanes and their potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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. White House Utility District 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 two 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>. If you choose to have your tap water tested, be sure to use a properly certified laboratory. Testing usually costs between \$20 and \$100.

## Is my drinking water safe?

Yes. The water produced by White House Utility District meets or exceeds ALL of the nation's water quality standards required by the Environmental Protection Agency as well as the State of Tennessee. We take great strides to ensure your water is safe every time you turn on your faucet. Daily water quality tests are conducted by WHUD to ensure the water produced and delivered to your home is safe to drink. Tests are routinely performed for over 80 possible contaminants using the newest technologies available.

As evidenced further in this report, during 2010 ten contaminants were detected in the water supply. Of the ten contaminants detected, all either naturally occurred at levels considered safe by the Environmental Protection Agency and the State of Tennessee or were reduced to safe levels by WHUD's water treatment process.

## What is the source of my water?

Your water, which is surface water, comes from Old Hickory Lake. Our goal is to protect your water from contaminants, and we work with the State of Tennessee on an on-going basis to examine the vulnerability of our water source to potential contamination. 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 water sources to potential contamination. The White House Utility District system source is rated as reasonably susceptible to potential contamination. To ensure safe drinking water, all public water systems treat and routinely test their water.

An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings, and the overall TDEC report to the EPA can be viewed online at [www.state.tn.us/environment/dws/dwassess.shtml](http://www.state.tn.us/environment/dws/dwassess.shtml).

# White House Utility District

## Water Quality Report

### 2010

#### Important Definitions

- AL** - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- 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.
- 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 drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- NTU** - Nephelometric Turbidity Unit - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- ppb** - Parts per billion, or Micrograms per liter - explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- ppm** - Parts per million or Milligrams per liter (mg/l) - explained as a relation to time and money as one part per million corresponds to one minute in two years or a single penny in \$10,000.
- TT** - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

Contaminant	Violation Yes/No	Level Detected	Range of Detections	Date of Sample	Unit of Measurement	MCLG	MCL	Likely Source of Contamination
Chlorine	NO	2.18 Avg.	.30 – 2.6	2010	ppm	MRDLG = 4	MRDL = 4	Added as a disinfectant to control microbes
Copper <sup>1</sup>	NO	0.19 90th percentile		2008	ppm	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	NO	1.6		2010	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
HAA <sup>5</sup>	NO	55 Avg.	32 – 86	2010	ppb		60	By-product of disinfection
Lead <sup>1</sup>	NO	2.2 90th percentile		2008	ppb	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits
Sodium	NO	2.6	2.6	2010	ppm			Erosion of natural deposits
TOC <sup>2</sup>	NO	1.55 Avg.	1.4 – 1.6	2010	ppm		TT	Naturally present in the environment
Total Coliform Bacteria	NO	0.25%		2010		0	<5% positive samples	Naturally present in the environment
TTHM <sup>4</sup> (total trihalomethanes)	NO	77 Avg.	45 – 91	2010	ppb		80	By-product of drinking water chlorination
Turbidity <sup>3</sup>	NO	0.15	.03 – .15	2010	NTU		TT	Soil runoff

<sup>1</sup> During the most recent round of lead testing, 0 out of 30 households sampled contained concentrations exceeding the action level of 15 ppb.

No copper samples exceeded the action level of 1.3 ppm.

<sup>2</sup> Treatment technique requirements were met for Total Organic Carbon in 2010.

<sup>3</sup> We met the treatment technique for turbidity with 100% of monthly samples being below the limit set by the EPA of 0.3 NTU. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

<sup>4</sup> Our drinking water meets EPA standards for trihalomethanes. The EPA establishes MCLs using the assumption that if most people drink 2 liters of water containing disinfection byproducts in excess of the MCL every day for 70 years, then 1 person in 10,000 may have an increased risk of cancer. 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.

Our Water Board meets quarterly on the last Tuesday of the months of March, June, September, and December at 9:00 a.m. at the WHUD office located at 3303 Highway 31-W in White House. These meetings are open to the public.

For more information about WHUD's testing results, please call Bill Treanor at (615) 824-4656.

During some summer months when customer usage is at a high, you receive water that has been treated and tested by the City of Springfield. For this reason, the information on this page has been supplied by the City of Springfield. The water, which is surface water, comes from the Red River. During the past year, numerous tests have been conducted by the City of Springfield for over 80 contaminants that may be present in drinking water. Only 12 were detected, and all were found to be at safe levels. WHUD also performs additional monitoring on this water before it reaches our customers.

#### City of Springfield

##### Water Quality Report

###### 2010

Regulated Substances							
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Violation	Typical Source
Chlorine (ppm)	2010	[4]	[4]	3	0.9 - 3.0	No	Water additive used to control microbes
Fluoride (ppm)	2010	4	4	1.47	.48 - 1.47	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA] (ppb)	2010	60	NA	32	6.1 - 70.8	No	By-product of drinking water disinfection
Nitrate <sup>1</sup> (ppm)	2010	10	10	5.5	3.6 - 5.5	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Simazine (ppb)	2010	4	4	0.09	BDL - 0.09	No	Herbicide runoff
TTHMs <sup>2</sup> [Total Trihalomethanes](ppb)	2010	80	NA	35	9.6 - 92.4	No	By-product of drinking water disinfection
Total Coliform Bacteria (% positive samples)	2010	5% of monthly samples are positive	0	.025	NA	No	Naturally present in the environment
Total Organic Carbon <sup>3</sup> (ppm)	2010	TT	NA	1.9	0.9 - 1.9	No	Naturally present in the environment
Turbidity <sup>4</sup> (NTU)	2010	TT	NA	0.37	.03 - .37	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2010	TT	NA	99%	NA	No	Soil runoff

Tap water samples were collected for lead and copper analysis from sample sites throughout the community							
Substance (Unit of Measure)	Year Sampled	Action Level	MCLG	Amount Detected (90th%tile)	Sites Above Action Level	Violation	Typical Source
Copper <sup>5</sup> (ppm)	2008	1.3	1.3	0.08	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead <sup>5</sup> (ppb)	2008	15	0	2.3	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

Unregulated Substances				
Substance (Unit of Measure)	Year Sampled	Amount Detected	Range Low-High	Typical Source
Sodium (ppm)	2010	4.7	NA	Erosion of natural deposits; used in water treatment

<sup>1</sup>Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

<sup>2</sup>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 systems and may have an increased risk of getting cancer.

<sup>3</sup>We met the treatment technique requirement for Total Organic Carbon in 2010.

<sup>4</sup>We met the treatment technique for turbidity in 2010 with 99% of monthly samples below the turbidity limit of 0.3 NTU. Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

<sup>5</sup>None of the 30 samples collected for lead and copper were over the action level.

LT2 Rule - The U.S. EPA has created the Long Term 2 Enhanced Water Treatment Rule (LT2) for the sole purpose of reducing illness linked with the contaminant Cryptosporidium and other disease-causing microorganisms in drinking water. The rule will bolster existing regulations and provide a higher level of protection of your drinking water supply. Sampling of our water source has shown the following: Cryptosporidium: (0.0 - 0.5 oocysts/L) - Our source water indicated the presence of Cryptosporidium in 3 out of 24 samples tested.

It is important to note that these results are from our raw water source only and are not from our treated drinking water supply. For more information, contact the U.S. EPA's Drinking Water Hotline at (800) 426-4791.

Cryptosporidium is a microbial parasite found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Monitoring of source water and/or finished water indicates the presence of these organisms. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks; however, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.