Jonesborough Water Quality Report 2008

Is my drinking water safe?
Yes, our water meets all of EPA□s health standards. We have conducted numerous tests for over 80 contaminants that may be in drinking water. As you□ll see in the chart on the back, we only detected 10 of these contaminants. We found all of these contaminants at safe levels.

What is the source of my water?
Your water, which is treated surface water comes from the Nolichuckey River. Our goal is to protect our water from contaminants and we are working with the State to determine 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. 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 geologic factors and human activities in the vicinity of the water source. The Jonesborough sources rated as reasonably susceptible to potential contamination.

An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at www.state.tn.us/environment/dws/dwassess.shtml or you may contact the Water System 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. 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).

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.

For more information about your drinking water, please call Virginia Causey at 423.453.1030.

How can I get involved?
Our Board of Mayor and Alderman meets on the second Monday of each month at Town Hall, 123 Boone St. at 7:00 p.m. Please feel free to participate in these meetings.

Is our water system meeting other rules that govern our operations?
The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met all of these requirements. Results of unregulated contaminant analysis are available upon request. We want you to know that we pay attention to all the rules.

Other 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, 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. The Jonesborough Water System's water treatment processes are designed to reduce any such substances to levels well below any health concern.

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 under-gone 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 not only their drinking water, but 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).

Lead in Drinking Water
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. Jonesborough Water System 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

Water System Security
Following the events of September 2001, we realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities, including treatment plants, pumping stations, tanks, fire hydrants, etc. to 753-1030

Water Quality Data

What does this chart mean?

- 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 or MRDL: 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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- AL - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- Below Detection Level (BDL) - laboratory analysis indicates that the contaminant is not present at a level that can be detected.
- Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.
- Parts per million (ppm) 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.
- Parts per billion (ppb) 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.
- Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- TT - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

Unless otherwise noted, the data in this table is from sampling performed during the 2008 calendar year

Contaminant	Violation Yes/No	Level Detected	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	No	0		2008		0	presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
Finished Water Turbidity[1]	No	0.3		Daily 2008	NTU	N/A	TT	Soil runoff
Copper*	No	90th%= 0.11		2007	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	No	1.15	0.73-1.15	2008	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead*	No	90th%= 3.2		2007	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Sodium	No	8.4		2008	ppm	N/A	N/A	Erosion of natural deposits; used in water treatment
TTHM[2] [Total trihalomethanes]	No	38.3 avg.	21.3-147.0	Quarterly 2008	ppb	N/A	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	No	38.3 avg.	15.9-61.0	Quarterly 2008	ppb	N/A	60	By-product of drinking water disinfection.
Total Organic Carbon[3]	No			2008	ppm	TT	TT	Naturally present in the environment.

Contaminant	Violation Yes/No	Level Found	Range of Detections	Date of Sample	Unit Measurement	MRDLG	MRDL	Likely Source of Contamination
Chlorine	No	1.8 avg.	0.5-3.0	Daily 2008	ppm	4	4	Water additive used to control microbes.

*During the most recent round of Lead and Copper testing, only 0 out of 30 households sampled contained concentrations exceeding the action level.

[1]100% of our samples were below the turbidity limit. [2] TTHMs (Total Trihalomethanes) Some people who drink water containing trihalomethanes in excess of MCL over many years may experience problems with their liver, kidneys or central nervous systems, and may have an increased risk of getting cancer. [3] We have met all treatment technique requirements for Total Organic Carbon removal.

EDUCATION AND OTHER INFORMATION

Cryptosporidium:

The Town of Jonesborough Water Treatment Plant, like other surface water plants across the nation, has been monitoring for cryptosporidium which is a microbial parasite found in surface water throughout the U.S. Although cryptosporidium can be removed by filtration, the most commonly used filtration methods cannot guarantee 100% removal. Monitoring of the SOURCE WATER indicated the presence of cryptosporidium in 1 out of 12 samples tests.

PLEASE NOTE: The EPA determined that the presence of cryptosporidium at the concentration level reported in the source water is insignificant, based on the level of treatment that the Town of Jonesborough Water Treatment Plant currently provides. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals are able to overcome the disease within a few weeks. However, Immuno-compromised people have more difficulty and are at greater risk of developing severe, life-threatening illness. Immuno-compromised people are encouraged to consult their doctor regarding appropriate precautions to take to prevent infection. For more information on cryptosporidium, contact the Safe Drinking Water Hotline at 800-426-4791.

CROSS-CONNECTION EDUCATION

Over the next few months, the warm weather will bring people outdoors to work in their yards and gardens and begin getting swimming pools ready. The ***Jonesborough Water System*** would like to ensure that our customers are aware of the dangers associated with these activities. An ordinary **garden hose** is a common way to contaminate a water supply when the hose is submersed in any liquid or attached to certain devices used to spray pesticides or herbicides. This forms a ***cross connection***. A cross connection is a situation where a possible source of contamination is directly linked to our public water system. If the end of your hose is connected to a chemical container, swimming pool or other contaminant during a water main break or fire, the substance can be siphoned back into the water system. This condition, known as ***back siphonage***, could cause a public health hazard. Devices are available to prevent this problem; however the best solution is to always be careful how you use your water hose.

Please help us provide a safe supply of water to all of our customers. Remember; never place your water hose in anything you would not want to drink. For more information on cross connections and how to protect against them, call our office at 423.753.1030.

WATER CONSERVATION

We all know that it has been extremely dry across the Southeast and the Jonesborough Water System service area is no exception. In order for us all to have a safe and plentiful supply of water, it is very important that each of us conserve water during this unusual dry-weather period. Please use water wisely; check your indoor and outside plumbing for leaks and make necessary repairs so that we hopefully can avoid restrictions on water use in the future.