GREENEVILLE WATER COMMISSION
WATER QUALITY REPORT 2013

Is my drinking water safe?
Yes we are proud to report that your water met or exceeded all State & Federal standards for drinking water during 2013. This report shows our water quality and what it means. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the treatment process and protect our water resources. We are committed to ensuring the quality of your water.

What is the source of my water?
Your water, which is 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 supply to contamination. The Tennessee Department of Environment and Conservation (TDEC) has 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. The Greeneville Water System sources rated 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.tn.gov/environment/dws/dwassess.shtml** or you may contact the Water System or **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. 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 Safe Drinking Water Hotline (800-426-4791). Este informe contiene informacion muy importante. Traduscalo O hable con alquien que lo entienda bien.**

FOR MORE INFORMATION ABOUT YOUR DRINKING WATER, PLEASE CALL US AT:
The Greeneville Filtration Plant Contact Name: David Ricker (423) 798-2045

How can I get involved?
The Greeneville Water Commission Board meets the last Tuesday of every month at 8:30 a.m. at the Commission office. Please feel free to participate in these meetings.

Is our water system meeting other rules that govern our operation?
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. We have always met all these requirements. We want you to know that we follow all drinking water regulations carefully in order to provide you with clean, safe drinking water.

Other information:
The sources of drinking water (both tap and bottle 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 materials, 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. Radio active contaminates, 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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in our water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We at the Greeneville Water Commission work around the clock to provide top quality water to every tap. We ask that all our customers to help us protect our water sources, which are the heart of our community, our way of life, and our children's future.

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 from their personal sanitation, food preparation, handling infants and pets, and drinking water 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).**

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Key

MCL= Maximum Contaminant Level-is the highest level of a contaminant that is allowed in drinking water. MCL's are set close to the MCLG as feasible using the best available treatment technology.

MRDL= Maximum Residual Disinfectant Level-The highest level of a disinfectant allowed in drinking water. There is 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.

MCLG= Maximum Contaminant Level Goal-the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

ppm= Parts per Million or Milligrams per liter-one part per million corresponds to one minute in two years or a single penny in $10,000.

ppb= Parts per Billion or Micrograms per liter-one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

TT= Treatment Technique- is a required process intended to reduce the level of a contaminant in drinking water.

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

NA= Not Applicable

AL= Action Level-the concentrations of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

pCi/L= Picocuries per liter (a measure of radioactivity)

BDL Below Detection Level
ug/1 Micrograms per liter
** **See footnote at bottom of page****

TREATED WATER QUALITY ROUNDUP

****Unless otherwise noted the data in this table is from sampling performed during 2013 calendar year****

Substance	Violations Yes/No	Highest Level Allowed (EPA'S MCL)	Highest Level Detected	Range of detections	Ideal Goals (EPA'S MCLG'S)	Date	Sources of Contaminant
MICROBIAL CONTAMINANTS							
Total Coliform (% Positive Sample)	**NO**	5% of monthly samples	0.022%		0%	2013	Naturally present in the environment
REGULATED AT CUSTOMER'S TAP		**90th percentile**			**# of houses exceeding AL**		
Lead*	**NO**	AL=15 ppb	1 ppb	1-140 ppb	0 1	2011	Corrosion of household plumbing; erosion of natural deposits.
Copper*	**NO**	1.3 ppm	0.160 ppm	0.014-0.250 ppm	0 0	2011	Corrosion of household plumbing; erosion of natural deposits.
REGULATED IN THE DISTRIBUTION SYSTEM							
Total Trihalomethanes	**NO**	80 ppb	21 ppb avg	7-25 ppb	NA	2013	By product of drinking water chlorination
Haloacetic Acids	NO	60 ppb	15 ppb avg	5-25 ppb	NA	2013	By product of drinking water chlorination
REGULATED AT THE TREATMENT PLANT					**Lowest % samples Meeting limits**		
Total organic carbon	**NO**	TT	0.93 ppm**	.057-0.93 ppm	NA	2013	Naturally present in environment
Turbidity	**NO**	TT	0.53 ntu	0.02-0.53 ntu	NA 99.90%	2013	Soil Runoff
Chlorine	**NO**	MRDL=4 ppm	3.1 ppm	1.5-3.1 ppm	MRDLG= 4 ppm	2013	Water additive used to control microbes
Alpha Emitters**	NO	MCL=15pCi/L	BDL	BDL	0	2012	Erosion of natural deposits
INORGANICS							
Fluoride	**NO**	4 ppm	0.73 pm	0.55-0.73 ppm	MCLG=4 ppm	2013	Water additive which promotes strong teeth
Sodium	NO	NA	5.3 ppm		NA	2013	Erosion of Natural deposits; used in water treatment
UNREGULATED AT THE TREATMENT PLANT							
Vanadium	NO		.5 ug/1	.2-.5 ug/1		2013	Naturally-occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst
Strontium	NO		97 ug/1	66-97 ug/1		2013	Naturally-occurring element: historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube television to block x-ray emissions
Chromium, Hexavalent	NO		.1 ug/1	.06-.10 ug/1		2013	Naturally-occurring element used in making in making steel and other alloys. Chromium -3 or -6 forms are used for chrome plating, dyes, and pigments, leather tanning, and wood preservation
UNREGULATED IN THE DISTRUBITION SYSTEM							
Vanadium	NO		.5 ug/1	.3-.5 ug/1		2013	Naturally-occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst
Strontium	NO		98 ug/1	68-98 ug/1		2013	Naturally-occurring element: historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube television to block x-ray emissions
Chromium	NO		7.9 ug/1	7.9 uh/1		2013	See chromium -6 for use or sourceinformation. Though the amount measured when analyzing for total chromium" is the sum of chromium in all of its valence states, the MCL for EPA's current total chromium regulation was determined based upon the health effects of chromium -6
Chromium, Hexavalent	NO		.11 ug/1	.07-.11 ug/1		2013	Naturally-occurring element;: used in making steel and others. alloys. Chromium -3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation

*****During the most recent round of lead and copper testing, 1* out of 30 households sampled contained concentrations exceeding the ation level for lead 0 out of 30 households sampled contained concentrations exceeding the action level for copper.**

**** ALL TREATMENT TECHNIQUES WERE MET FOR TOTAL ORGANIC CARBON AND TURBIDITY**

*****If the results of the sample had been above 15pCi/L, our system would have been required to do additional testing for uranium. Because the results were below 15pCi/L, no testing for uranium was required.**

******Turbidity does not present any risk to your health. We monitor turbidity, which is a measure of the cloudiness of water, because it is a good indicator that our filtration system is functioning properly.**

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal & State requirements. We have learned through our monitoring and testing that some substances have been detected. The EPA has determined your water **IS SAFE** at these levels. MCL'S are set at very stringent levels. To understand the possible health effects described for many regulated substances, 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. We had two positive total coliform samples out of five hundred and twenty three samples. All the repeat samples were negative, there were no violations. 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. We met the treatment technique for turbidity with 100.0% of monthly samples below the turbidity limit of 0.3 ntu. 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 Greeneville Water Commission 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.**

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations is warranted. For additional information call the Safe Drinking Water Hotline at (800)426-4791.