

GREENEVILLE WATER COMMISSION WATER QUALITY REPORT 2015



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 2015. 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 Nolichucky 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 Greenville 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/article/wr-wq-source-water-assessment 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 alguien que lo entienda bien.**

FOR MORE INFORMATION ABOUT YOUR DRINKING WATER, PLEASE CALL US AT:

The Greenville Filtration Plant Contact Name: David Ricker (423) 798-2045

How can I get involved?

The Greenville 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 Greenville 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)**.

WATER QUALITY REPORT 2015

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/l Micrograms per liter
- LRAA Locational Running Annual Average

**** See footnote at bottom of page****

TREATED WATER QUALITY ROUNDUP

****Unless otherwise noted the data in this table is from sampling performed during 2015 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 |
|---|-------------------|-----------------------------------|------------------------|---------------------|---------------------------------|------|---|
| <u>MICROBIAL CONTAMINANTS</u> | | | | | | | |
| Total Coliform (% Positive Sample) | NO | 5% of monthly samples | 0.022% | | 0% | 2015 | Naturally present in the environment |
| <u>REGULATED AT CUSTOMER'S TAP 90th percentile</u> | | | | | | | |
| Lead* | NO | AL=15 ppb | 3 ppb | 1-9 ppb | # of houses exceeding AL 0 0 | 2014 | Corrosion of household plumbing; erosion of natural deposits. |
| Copper* | NO | 1.3 ppm | 0.120 ppm | 0.018-0.240 ppm | 0 0 | 2014 | Corrosion of household plumbing; erosion of natural deposits. |
| <u>REGULATED IN THE DISTRIBUTION SYSTEM</u> | | | | | | | |
| Total Trihalomethanes | NO | 80 ppb | LRAA 28ppb | 10-61 ppb | NA | 2015 | By product of drinking water chlorination |
| Haloacetic Acids | NO | 60 ppb | LRAA 19 ppb | 9-34 ppb | NA | 2015 | By product of drinking water chlorination |
| <u>REGULATED AT THE TREATMENT PLANT</u> | | | | | | | |
| Total organic carbon** | NO | TT | 1.15 ppm** | .055-1.15 ppm | NA | 2015 | Naturally present in environment |
| Turbidity ** | NO | TT | 0.14 ntu | 0.02-0.14 ntu | NA 100.00% | 2015 | Soil Runoff |
| Chlorine | NO | MRDL=4 ppm | 3.1 ppm | 1.7-3.1 ppm | MRDLG= 4 ppm | 2015 | Water additive used to control microbes |
| Alpha Emitters*** | NO | MCL=15pCi/L | < 1.1pCi/l | <1.1pCi/l | 0 | 2015 | Erosion of natural deposits |
| <u>INORGANICS</u> | | | | | | | |
| Fluoride | NO | 4 ppm | 0.71 pm | 0.58-0.71 ppm | MCLG=4 ppm | 2015 | Water additives which promotes strong teeth |
| Sodium | NO | NA | 5.7 ppm | | NA | 2015 | Erosion of Natural deposits: used in water treatment |
| Barium | NO | 2ppm | .022 ppm | .022 ppm | | 2015 | Discharge of drilling wastes, and metal refineries; Erosion from natural deposits |

***During the most recent round of lead and copper testing, 0 out of 30 households sampled contained concentrations exceeding the action 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. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

******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 one positive total coliform samples out of five hundred and thirty 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.**