

2016
Darlington County Water and Sewer Authority
Annual Drinking Water Quality Report
DHEC 1620001

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of the water we deliver to you every day. 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 water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water is produced from 12 wells in Darlington County. Our Source Water Assessment Plan is available for your review at <http://www.scdhec.gov/HomeAndEnvironment/water/SourceWaterProtection>. If you do not have internet access, please contact Jerry Stutts, Operations Manager, 843-393-8131 EXT. 303 to make arrangements to review this document. We are pleased to report that our drinking water is safe and meets federal and state requirements. This report shows our water quality and what it means.

If you have any questions about this report or concerning your water utility, please contact Jerry Stutts, Operations Manager, 843-393-8131 EXT. 303. We want our valued customers to be informed about their water utility.

Darlington County Water and Sewer Authority routinely monitors for constituents in your drinking water in accordance with Federal and State laws. The tables below show the results of our monitoring for the period of January 1 to December 31, 2016. As water travels over the land or underground, it can pick up substances or 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; and 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; Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses; and radioactive substances, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact Jerry Stutts at 843-393-8131 EXT 303 or Post Office Box 968, Darlington, SC 29540-0968.

In the tables that follow you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - 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 - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

Action Level - the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Highest Level Detected (HDL) - maximum amount found in any one sample

Maximum Contaminant Level Goal (MCLG) - The "Goal" (MCLG) is 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.

Maximum Contaminant Level (MCL) - The "Maximum Allowed" (MCL) is 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.

Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - 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.

Avg - Regulatory compliance with some MCLs are based on running annual average of monthly samples

LEAD AND COPPER TEST RESULTS						
Contaminant	Violation Y/N	90th percentile	Unit Measurement	Action Level	Sites over action level	Likely Source of Contamination
Copper 2014	N	0.2	ppm	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead 2014	N	0.0	ppb	15	0	Corrosion of household plumbing systems, erosion of natural deposits

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 Darlington County Water & Sewer Authority 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 second to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking 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>.

Disinfection By-Products						
Contaminant	Violation Y/N	Range of Levels Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) 2016	N	0 – 29.8	PPB	No goal for the total	60 PPB	By-products of drinking water disinfection
Trihalomethanes (TTHM) 2016	N	0 – 0.0	PPB	No goal for the total	80 PPB	By-products of drinking water disinfection

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants						
Fluoride 2014	N	Range 0.00 - 0.87	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen) 2016	N	Range 0.0 – 1.0	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
+Disinfectants						
Chlorine 2016	N	Range 0.34 - 0.69	ppm	MRDL= 4	MRDLG = 4	Water additive used to control microbes
Radioactive Contaminants						
Combined radium 2016	N	Range 0.0 – 3.2	pCi/L	0	5	Erosion of natural deposits
Alpha emitters 2016	N	Range 0.0 – 3.2	pCi/L	0	15	Erosion of natural deposits

What does this mean?

In order to ensure that tap water is safe to drink, EPA prescribes 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. As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 the 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 at 1-800-426-4791.

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 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

The Authority's Source Water has been tested under EPA's Unregulated Contaminant Monitoring Rule 3. The results of these tests are available for review at the Darlington County Water & Sewer Authority's office.

Please call our office if you have questions.