2018
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. (CCR) This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies. Our water is produced from 12 wells drilled approximately 500 feet deep. There are 5 wells and a treatment plant located on Ruby Road, 4 wells and a treatment plant located in the Ashland area of the county, and 3 wells and a treatment plant located on Center Road. A source water assessment has been completed for our system by SCDHEC. For more information , please contact SCDHEC at 803-898-3531. 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, 2018. 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. To ensure tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The tables below list all the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in these tables is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In these tables you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below. 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 this data is 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.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. 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).

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.
Parts per Trillion (ppt) – one part per trillion corresponds to one second in nearly 32,000 years, or one ounce in 7.5 billion gallons of water.
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
RAA – Running Annual Average

LEAD AND COPPER TEST RESULTS

Contaminant	Violation Y/N	90th percentile	Unit Measurement	Action Level	Sites over action level	Likely Source of Contamination
Copper 2017	N	0.14	ppm	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead 2017	N	4.10	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) 2018	N	0 – 1.3	ppb	No goal for the total	60 PPB	By-products of drinking water disinfection
Trihalomethanes (TTHM) 2018	N	0	ppb	No goal for the total	80 PPB	By-products of drinking water disinfection

Contaminant	**Violation Y/N**	**Running Annual Average**	**Unit Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Haloacetic Acids (HAA5) 2018	N	0.22	ppb	No goal for the total	60 PPB	By-products of drinking water disinfection

Contaminant	**Violation Y/N**	**Level Detected**	**Unit Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Inorganic Contaminants						
Fluoride 2018	N	Range 0.36 – 1.2	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen) 2018	N	Range 0.068 – 1.0	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
+Disinfectants						
Chlorine 2018	N	Range 0.22 - 0.86	ppm	MRDL 4	MRDLG 4	Water additive used to control microbes
Chlorine 2018	N	RAA 0.54	ppm	MRDL 4	MRDLG 4	Water additive used to control microbes
Unregulated Contaminant						
Sodium 2018	N/A	Range 1.6 – 1.8	ppm	MCL N/A	MCLG N/A	Erosion of natural deposits
Radioactive Contaminants						
Combined radium 2018	N	Range 0.0 – 2.54	pCi/L	0	5	Erosion of natural deposits
Alpha emitters 2018	N	Range 0.0 – 2.17	pCi/L	0	15	Erosion of natural deposits

Dibromochloro-propane (DBCP)	N	0.00 – 0.026	ppt	0	0	Runoff/Leaching from soil fumigant used on soybeans, cotton, and orchards.

What does this mean?

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.

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.