

2018 Water Quality Report

Town of Kingstree

DHEC System # 4510002

We're pleased to provide you with this year's Water Quality Report. We want to keep you informed about the water and services we have delivered to you over the past year. Our goal is to provide to you a safe and dependable supply of drinking water. We are committed to ensuring the quality of your water. The source of our water is ground water produced by four active wells receiving water from the Black Creek, Middendorf, and Cape Fear Aquifers. The Town of Kingstree currently treats an average of .915 MGD (million gallons/day) with the ability to treat 3 MGD. A Source Water Assessment Plan has been prepared for our system. If you have any questions about this report or concerning your water utility, please contact Cedric Hudson at (843)355-7484. We want you, our neighbors and valued customers, to be informed about your water utility.

This report shows our water quality and what it means. The Town of Kingstree routinely monitors for constituents in your drinking water according to Federal and State laws. As water travels over the land or underground, it can pick up substances or contaminants such as microbes and chemicals. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

The table below shows the results of our monitoring for the period of January 1st to December 31st, 2018. In this table you will find the following terms and abbreviations:

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

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.

Maximum Contaminant Level - 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. MCL's are set at very stringent levels. 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.

Maximum Contaminant Level Goal - 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 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.

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

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LEAD and COPPER TEST RESULTS

Contaminant	Violation Y/N	90 th percentile	Unit Measurement	MCLG	Action Level	Sites over action level	Likely Source of Contamination
Copper 2018	N	0.075	ppm	1.3	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead 2018	N	2.40	ppb	0	15	0	Corrosion of household plumbing systems; Erosion of natural deposits.

REGULATED CONTAMINANTS

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation (Y/N)	Likely Source of Contamination
Total Trihalomethanes (TTHM)	2018	LRAA 30	29.7-29.7	No goal for the total	80	ppb	N	By-product of drinking water disinfection
Haloacetic Acids HAA5	2018	LRAA 11	11.0-11.0	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Chlorine	2018	RAA 0.66	0.39 – 0.96	MRDL 4	MRDLG 4	ppm	N	Water additive used to control microbes

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation Y/N	Likely Source of Contamination
Nitrate (measured at Nitrogen)	2016	0.063	0.063-0.063	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits
Fluoride	2018	2.20	2.20-2.20	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

Other Substances Monitored in Drinking Water

NAME	REPORTED LEVEL	RANGE
	ppm	Low - High
Sodium 2016	130	73 - 130



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Coliform Bacteria						
Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	2.00	0,	0	N	Naturally present in the environment

E. Coli

Fecal Coliforms and E. Coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, the elderly and those with a compromised immune system.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITOR GWR TRIGGERED/ ADDITIONAL, MAJOR	10/01/2015	2018	We failed to collect follow-up samples within 24 hours of learning of the total coliform-positive sample. These needed to be tested for fecal indicators from all sources that were being used at the time the positive sample was collected.

IMPORTANT NOTICE ABOUT YOUR DRINKING WATER

Elevated Fluoride Levels Detected in the Town of Kingstree Water System

*This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/l) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by the Town of Kingstree has a fluoride concentration of 2.20 mg/l.

Dental fluorosis in its moderate or severe forms may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid possible staining or pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/l of fluoride (the US Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/l of fluoride, but we are required to notify you when we discover that fluoride levels in your drinking water exceed 2 mg/l because of cosmetic dental problems.

**Fluoride.* Some people who drink water containing fluoride in excess of the MCL, over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth. South Carolina has a secondary standard of 2.0 ppm. For more information, please call Cedric Hudson at the Town of Kingstree water Department at 843-355-7484. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available water treatment units, you may call NSF International at 1-877-8-NSF-HELP.

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 800-426-4791.

If you have special health needs--

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).

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 Town of Kingstree 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 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>

