

The City of Florence Has Never Violated Drinking Water Standards for Lead.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. A high level of lead in drinking water can cause health problems, particularly in children. SCDHEC works to ensure that public water systems adhere to drinking water quality standards and regulations. Lead is rarely in drinking water when it leaves the treatment plant; however, it can seep into the water from old plumbing.



Where Your Water Comes From

The City of Florence relies on groundwater as its primary supply source. Groundwater flows within the Crouch Branch aquifers. The City provides drinking water for approximately 84,225 people, including 30,172 residences and 3,518 businesses. The groundwater well system supplies about 65% of Florence's drinking water. The City of Florence also operates the Pee Dee River Regional Surface Water Plant. This plant utilizes the Pee Dee River and provides approximately 35% of Florence's water supply. "It is our obligation to provide a safe clean source of drinking water to our customers," said Randy Osterman, City Manager of Florence.

Florence City Council

Florence City Council governs and sets policies to manage to fund public utilities. City staff follows the necessary protocol to comply with all federal and state regulatory requirements. City Council meets the second Monday each month in Council Chambers at the City Center. The City Center location is 324 West Evans St. in Florence, S.C. Customers and the public are encouraged to attend these meetings.

If You Have Special Health Concerns

Some people may be more vulnerable to substances in drinking water than the general population. Immuno-compromised persons, such as persons undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly individuals and infants can be particularly at risk due to infections. These people should seek advice about drinking water from their healthcare providers. The Environmental Protection Agency (EPA) and the Centers for Disease Control (CDC) provide guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological substances. Further information is available from the Safe Drinking Water Hotline at 1-800-426-4791.

About This Report

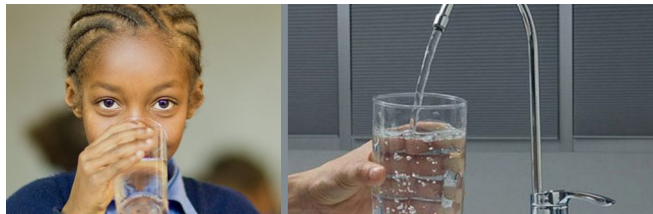
The report informs customers about water quality and increases customer understanding of drinking water and treatment. Federal authorities and laws prescribed the technical language, terms, descriptions, definitions, precautionary statements, and scientific data in this report. The South Carolina Department of Health and Environmental Control (SCDHEC) validated the sampling results listed.

You may call the EPA's Safe Drinking Water Hotline for more information about contaminants and potential health effects at 1-800-426-4791. For more information about this report, don't hesitate to contact Michael Hemingway at (843) 665-3236.

What's In Your Drinking Water

All drinking water sources are subject to potential contamination by naturally occurring or artificial substances. These substances can be microbes, inorganic or organic chemicals, and radioactive substances. All drinking water, including bottled water, may contain at least minor traces of some contaminants. Contaminants do not necessarily indicate that the water poses a health risk.

The City of Florence water system has prepared a source water assessment report. The information may be reviewed by contacting Malcolm Cook at (843) 665-3236.



2021 Water Quality Report

The City of Florence is ecstatic to report that the drinking water supplied to our citizens and customers throughout the 2021 calendar year was of the highest quality and exceeded all state and health safety standards.

The City of Florence is pleased to present the 2021 Annual Water Quality Report. City staff works diligently to provide exceptional water service that meets customer expectations and fulfills all state and federal regulatory compliance. "The importance of fresh, clean, and safe drinking water can't be overemphasized," said City Manager Randy Osterman. "We are pleased our monitoring results confirm our continuing effort to provide reliable service to our customers."

If needed, contact Michael Hemingway, City of Florence Utilities Director, at (843) 665-3236.

The sampling data collected by the City of Florence is scientifically analyzed and confirmed by SCDHEC.

The 2021 annual report provides results of the challenging testing completed from January 1, 2021, through December 31, 2021. The city is committed to producing the highest quality of water, promoting quality of life for everyone. The sampling data is presented in a table included in this report.



2021

City of Florence

Water Quality Report



Devoted To Water Quality Excellence



www.cityofflorence.com

Fluoride

Fluoride is a naturally occurring element that helps prevent tooth decay. To maintain an acceptable level of fluoride a small amount of fluoride is added during the water treatment process, as recommended by the American Medical Association (AMA) and the American Dental Association (ADA).

Table Definitions

HAA5 Halo acetic Acids

TTHM Total Trihalomethanes

MCLG Maximum Contaminant Level Goal. The level of contaminant in drinking water below which there is no known or expected health risk. MCLGs provide a margin of safety.

MCL Maximum Contaminant Level. 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.

ND Non-Detected. No measurable level of a substance or contaminant detected.

PPB Parts Per Billion. The equivalent of one penny in \$10,000,000 or one minute in 2,000 years.

90th Percentile Of all samples analyzed, 90 percent were at or below the detection level.

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

DBPR Disinfectant Byproduct Rule

PPM Parts Per Million. The equivalent of one penny in \$10,000 or one minute in two years.

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

MRDLG Maximum Residual Disinfectant Level Goal. Level of drinking water disinfectant below which there is no known risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NTU Nephelometric Turbidity Unit. Units of measure to indicate water clarity.

TT Treatment Technique. Required process intended to reduce the level of a contaminant in drinking water.

LRAA Locational Running Annual Average.

2021 Water Quality Sampling Results

The following table shows actual sampling results for substances detected in the Florence water systems for the period Jan. 1 to Dec. 31, 2021, compared with state and federal health and safety standards for those substances.

WATER QUALITY DATA TABLE

Lead and Copper—Inorganic Contaminants

Contaminants (unit of measure)	ALG	AL	90 th percentile	# Samples Exceeding AL	Exceeds AL (Yes/No)	Sample Date	Typical Source
Copper-action level at consumer taps (ppm)	1.3	1.3	0.19	0	No	2021	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead-action level at consumer taps (ppb)	0	15	1.5	0	No	2021	Corrosion of household plumbing systems. Erosion of natural deposits.

Chemical and Radionuclide Constituents

Contaminants (unit of measure)	MCLG or MRDLG	MCL, TT, or MRDL	Detect in Your Water	Range	Violation (Yes or No)	Sample Date	Typical Source
Nitrate (ppm)	10	10	1	0 – 0.90	No	2021	Runoff from fertilizer use. Erosion of natural deposits.
Barium (ppm)	2	2	0.067	0 – 0.067	No	2021	Erosion of natural deposits.
Fluoride (ppm)	4	4	0.66	0 – 0.66	No	2021	Erosion of natural deposits; Water additive which promotes strong teeth.
Sodium (ppm) [unregulated]	NA	NA	14 (average)	2.7 – 40	No	2021	Naturally occurring.
Combined Radium 226/228 (pCi/L)	0	5	0.263	0.0887 – 0.263	No	2020	Erosion of natural deposits.
Beta/photon emitters (pCi/L)	0	50*	7.58	3.82 – 7.58	No	2020	Decay of natural and man-made deposits

*The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles. Because the beta particle results were below 50 pCi/L, no testing for individual beta particle constituents was required.

Disinfectant and Disinfection By-Products

Contaminants (unit of measure)	MCLG or MRDLG	MCL, TT, or MRDL	Detect in Your Water	Range	Violation (Yes or No)	Sample Date	Typical Source
Chlorine (ppm)	4	4	0.80 RAA	0.69 – 0.89	No	2021	Water additive used to control microbes
HAA5 [Haloacetic Acids] (HAA5)(ppb)	No goal for the total	60	12 LRAA	0 – 17	No	2021	By-product of drinking water chlorination.
TTHMs [Total Trihalomethanes] (ppb)	No goal for the total	80	50 LRAA	0 – 53.42	No	2021	By-product of drinking water disinfection.

Pee Dee River Surface Water Plant Data

Turbidity	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.12 NTU	No	Soil runoff
Lowest monthly % meeting limit	0.3 NTU	100.000%	No	Soil runoff

Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.

Total Organic Carbon Information for

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.