

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. That's why 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 along the way.



Where Your Water Comes From

The City of Florence relies on groundwater as its primary supply source. Groundwater flow within the Crouch Branch aquifers. The City provides drinking water for approximately 82,735 people, including 29,624 residences and more than 3,628 businesses. Approximately 70% of Florence's drinking water is provided by the groundwater well system. The City of Florence also operates the Pee Dee River Regional Surface Water Plant. This plant, which utilizes the Pee Dee River as its source provides approximately 30% of Florence's water supply. "It is our obligation to provide a safe reliable clean source of drinking water to our customers", said Randy Osterman, City Manager of the City of Florence.

Florence City Council

Florence City Council governs and sets policies to manage funding for public utilities, and City staff follows necessary protocol to ensure the city's compliance 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 is located at 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

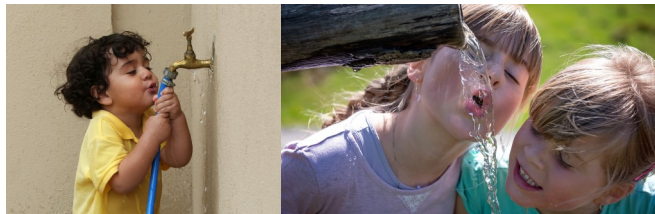
This report is designed to inform customers about water quality and to increase customer understanding of drinking water and how it is treated. The technical language, terms, descriptions, definitions, precautionary statements and scientific data contained in this report were prescribed by federal authorities and laws. The South Carolina Department of Health and Environmental Control (SCDHEC) validated the sampling results listed.

For more information about contaminants and potential health effects, you may call the EPA's Safe Drinking Water Hotline at 1-800-426-4791. For more information about this report please contact Michael Hemingway at (843) 665-3236.

What's In Your Drinking Water

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 contain at least minor traces of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk.

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



2020 Water Quality Report

The City of Florence is once again ecstatic to report that the drinking water supplied to our citizens and customers throughout the 2020 calendar year was of the highest quality and exceeded all state and health safety standards.

The City of Florence is pleased to present the 2020 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."

For more information, 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 2020 annual report provides results of the challenging testing completed January 1, 2020 through December 31, 2020. The city is committed to producing the highest quality of water promoting a quality of life enjoyable for everyone. The sampling data is presented in a table included in this report.



2020

City of Florence

Water Quality Report



Committed 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.

2020 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, 2020, compared with state and federal health and safety standards for those substances.

Contaminant	Violation	Level Detected	Measurement Unit	MCLG	MCL	Likely Source of Contamination
Combined Radium 2015,2016,2018 (data)	No	1.26 ND—1.26 (Range)	piCi/L	NA	5	Erosion of natural deposits
Beta/photon Emitters (MCL = 4 mrem/yr) 2015,2016,2018 (data)	No	7.58 ND—7.58 (Range)	piCi/L	NA	50** piCi/L	Decay of natural and man-made deposits
Fluoride	No	0.10	PPM	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Lead (2018 Data)	No	90th Percentile 5.0	PPB	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
Copper (2018 Data)	No	90th Percentile 0.51	PPM	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Sodium	No	27.0	PPM	N/A	N/A	Corrosion of household plumbing systems; erosion of natural deposits
Nitrate/Nitrite	No	ND – 0.95 (Range)	PPM	10	10	Runoff from fertilizer; leaching from septic tanks, sewage; erosion of natural deposits
HAA5* Stage 2 DBPR	No	Max LRAA : 13.0 ND - 15.6/ (Range)	PPB PPB	0	60	By-product of drinking water chlorination
TTHM* Stage 2 DBPR	No	Max LRAA : 51.0 ND - 63.1 (Range)	PPB PPB	0	80	By-product of drinking water chlorination

- *Compliance is based on LRAA, not on individual samples. **EPA consider 50 piCi/L to be a level of concern for beta particles.

Pee Dee River Surface Water Plant Data

Contaminant	Violation	Highest Single Sample	Measurement Unit	Lowest Monthly Percentage Meeting Standard
Turbidity	No	0.15	NTU	100%

Additional Surface Water Plant Data

Contaminant	Violation	Level Detected	Measurement Unit	MRDLG	MRDL	Likely Source of Contamination
Chlorine	No	RAA: 0.83		4	4	Treatment Technique
TOC	No	1.3— 3.1 (Range)	PPM			Decay of naturally occurring organic matter
TOC Removal	No	RAA Ratio: 1.40	Dimensionless	RAA Ratio Standard>1.0		Treatment Technique

The Fourth Unregulated Contaminant Monitoring Rule (UCMR4)

DATA FOR CY2020 ONLY

Data Run Date 3/17/2021

PWSCode SC2110001 units of measure µg/L or ppb

Row Labels	Count of Result-BelowMRL	Min of ResultMeasure	Max of Result-Measure	Average of ResultMeasure	
AM1					<p>Unregulated contaminants monitoring helps EPA to determine when certain contaminants occur and whether the EPA should consider regulating those contaminants in the future.</p> <p>What is the Unregulated Contaminant Monitoring Rule?</p> <p>The 1996 amendments to the Safe Drinking Water Act (SDWA) require that once every five year, the U.S. Environmental Protection Agency (EPA) issue a new list of no more than 30 unregulated contaminants to be monitored by public water systems (PWSs). The UCMR provides EPA and other interested parties with scientifically valid data on the occurrence of contaminants in drinking water.</p> <p>UCMR 4 monitoring occurred from 2018-2020 and includes monitoring for a total of 30 chemical contaminants: 10 cyanotoxins (nine cyanotoxins and one cyanotoxin group) and 20 additional contaminants (two metals, eight pesticides plus one pesticide manufacturing byproduct, three bromide halo acetic acid (HAA) disinfection byproducts groups, three alcohols, and three semi volatile organic chemicals (SVOCs). The City of Florence monitoring was conducted during the 2020 year.</p>
1-butanol	24				
2-methoxyethanol	24				
2-propen-1-ol	24				
alpha-hexachlorocyclohexane	24				
butylated hydroxyanisole	24				
chlorpyrifos	24				
dimethipin	24				
ethoprop	24				
germanium	24				
manganese	24	0.541	10.7	3.446652174	
o-toluidine	24				
oxyfluorfen	24				
profenofos	24				
quinoline	24				
tebuconazole	24				
total permethrin	24				
tribufos	24				
AM2					
bromide	4	23.4	27.7	25.55	
HAA5	32	0	23.45	10.668	
HAA6Br	32	0	7.243	3.08378125	
HAA9	32	0	28.93	13.65821875	
total organic carbon	4	3820	6030	4852.5	
AM3					
anatoxin-a	8				
cylindrospermopsin	8				
total microcystin	8				

How can I learn more?

General information is available on the UCMR web page or by calling the Safe Drinking Water Hotline at 800-426-4791