

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 DHEC 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 is obtained from deep wells drilled into the Middendorf and Black Creek aquifers. The City provides drinking water for approximately 80,698 people, including 28,723 residences and more than 3,556 businesses. Approximately 70 percent of Florence's 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 percent of Florence's water supply. "There is plenty of water in our universe without life; but nowhere is there life without water. The City of Florence is tapped into water quality" said Drew Griffin, the City of Florence City Manager.

Florence City Council

The City of Florence through Florence City Council and city staff in compliance with federal and state regulatory requirements govern the policies and manage funding of the utilities department. 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.

2018 Water Quality Report

The City of Florence water system recently violated a drinking water requirement. January 3, 9, 10, 14 and 28, 2018, the City of Florence exceeded the daily maximum technical compliance limit for turbidity at a location within our treatment process. The elevated turbidity (cloudiness of the water) compliance issue was initially published for public notice March 22, 2018. As such, the City of Florence received a Treatment Technique Violation from the South Carolina Department of Health and Environmental Control (DHEC) for maximum turbidity events that occurred five separate days in January. Excessive turbidity "may" result in inadequately treated water. But in our case, **not one** of our required daily water distribution system tests showed evidence of any poor water treatment or evidence of any contaminants at our surface water treatment plant and within the water distribution system.

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 most recent sampling data collected and analyzed for the Florence Water Systems for the period Jan.1, 2018, through Dec. 31, 2018, shows that the City's drinking water contains only a few of the elements and substances covered by the Safe Drinking Water Act. The sampling data is presented in a table included in this report.



2018
City of Florence
Water Quality Report

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The graphic features a blue background with water splashes and bubbles. At the bottom, there is a photograph of a white water tower with the City of Florence logo and name. The text is arranged in a clean, modern layout.

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 AMA and the ADA.

Table Definitions

HAA5 Haloacetic 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.

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

LRAA Locational Running Annual Average.

2018 Water Quality Sampling Results

The following table shows actual sampling results for substances detected in the Florence and Timmonsville water systems for the period Jan. 1 to Dec. 31, 2018, compared with state and federal health and safety standards for those substances.

Contaminant	Violation	Level Detected	Measurement Unit	MCLG	MCL	Likely Source of Contamination
Fluoride	No	61.0	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	1.3	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	31.0	PPM			Corrosion of household plumbing systems; erosion of natural deposits
Nitrate/Nitrite	No	ND – 0.66 (Range)	PPM	10	10	Runoff from fertilizer; leaching from septic tanks, sewage; erosion of natural deposits
HAA5* Stage 2 DBPR	No	Max LRAA : 18.0 ND - 25.6 (Range)	PPB PPB	0	60	By-product of drinking water chlorination
TTHM* Stage 2 DBPR	No	Max LRAA : 54.0 ND - 82.3 (Range)	PPB PPB	0	80	By-product of drinking water chlorination

* Compliance is based on LRAA, not on individual samples

Pee Dee River Surface Water Plant Data

Contaminant	Violation	Highest Single Sample	Measurement Unit	Lowest Monthly Percentage Meeting Standard
Turbidity	Yes	3.00	NTU	100%

Additional Surface Water Plant Data

Contaminant	Violation	Level Detected	Measurement Unit	MRDLG	MRDL	Likely Source of Contamination
Chlorine	No	RAA: 0.88 0.55-0.79 (Range)	PPM	4	4	Treatment Technique
TOC	No	0.7 — 2.2 (Range)	PPM			Decay of naturally occurring organic matter
TOC Removal	No	RAA Ratio: 1.76	Dimensionless	RAA Ratio Standard>1.0		Treatment Technique