

Providing Superior Quality Water Service: 2004 City Of Florence Water Quality Report

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. More information about contaminants, as well as their potential health effects, can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

A source water assessment report has been prepared for the City of Florence water system. The report may be reviewed at the City of Florence Utility Department office by contacting Forrest Whittington, Department Manager, at (843) 665-3236.

FLUORIDE

Fluoride is a naturally occurring element produced by geologic deposits in groundwater supplies that helps prevent tooth decay. Because naturally occurring levels of fluoride are low in the City's source waters, a small amount is added during the treatment process as recommended by the American Medical Association and the American Dental Association.

YOUR DRINKING WATER

Providing high-quality drinking water is a priority for the City of Florence. With the City's dedication to superior drinking water service, customers can have confidence that their drinking water is safe, healthy and of the highest quality. This report is designed not only to inform customers about water quality and the City of Florence's commitment, but also to increase customer understanding of drinking water and how it is treated.

2004 WATER QUALITY REPORT

The City of Florence is proud to report that the drinking water supplied to citizens and customers throughout the 2004 calendar year was of the highest quality and surpassed all state and federal health and safety standards.

"The City of Florence is constantly working to provide the highest quality drinking water possible," said David Williams, City of Florence City Manager. "With the 2004 Water Quality Report, we are pleased to report that the drinking water the City of Florence supplied to customers throughout 2004 was healthy, safe and of optimal quality. Our Utilities Department works hard and is dedicated to the task of providing healthful and good tasting water. Our City Council has been proactive in providing the support and funding necessary to ensure that our community has an ample supply of drinking water and treatment facilities for the provision of water to all our customers. This report includes a summary of monitoring and sampling results and shows that the City's drinking water continues to exceed all state and federal standards."

To ensure the City's drinking water constantly meets the standards set forth in the federal Safe Drinking Water Act, the City of Florence routinely collects sampling data for over 100 elements and substances that may be present in public drinking water supplies from both organic and man-made sources. The sampling data collected by the City of Florence is scientifically analyzed and the results confirmed by the South Carolina Department of Health and Environmental Control (SCDHEC).

The most recent sampling data collected and analyzed for the City of Florence Water System for the period January 1, 2004 through December 31, 2004 shows that the City's drinking water contains only a few of the elements and substances covered by the Safe Drinking Water Act. The concentrations of these substances were well below the limits prescribed in the Safe Drinking Water Act. This sampling data is presented in a table which is included in this report.



WHERE YOUR WATER COMES FROM

The City of Florence relies on groundwater as its primary supply source. Groundwater is obtained from deepwells drilled into the Middendorf and Black Creek aquifers. The City provides drinking water for approximately 65,000 people including nearly 24,900 residences and more than 2,760 businesses. Approximately 55 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 45 percent of Florence's water supply.

FLORENCE CITY COUNCIL

Florence City Council governs the policies, funding and management of the City Utility Department. City Council meets the second Monday each month at 1 p.m. in Room 604 of the City-County Complex. The city-county complex is located at 180 North Irby Street in Florence, S.C. Customers and the public are welcome 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. Environmental Protection Agency (EPA) and Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological substances are available from the Safe Drinking Water Hotline at 1-800-426-4791.

ABOUT THIS REPORT

The technical language, terms, descriptions, definitions, precautionary statements and scientific data contained and displayed in this report were strictly prescribed and mandated by federal authorities and federal 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 or the City of Florence's water quality, please contact Mack Maloch at (843) 665-3271 or Forrest Whittington at (843) 665-3236.



2004 WATER QUALITY SAMPLING RESULTS

The following table shows actual sampling results for substances detected in the City of Florence's groundwater systems for the period January 1 to December 31, 2004, compared with state and federal health and safety standards for those substances.

CONTAMINANT	VIOLATION	LEVEL DETECTED	UNIT MEASUREMENT	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
FLUORIDE	NO	0.83	PPM	4	2	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
COPPER	NO	90th Percentile 0.78	PPM	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
NITRATE	NO	0.63	PPM	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
HAA5 (HALOACETIC ACIDS)	NO	RAA: 4.3 ND - 22.6 (Range)	PPB	0	60	Byproduct of drinking water chlorination
TTHM AVERAGE* (TOTAL TRIHALOMETHANES)	NO	RAA: 11.5 ND - 96 (Range)	PPB	0	80	Byproduct of drinking water chlorination

* Compliance is based on RAA, not on individual samples.

PEE DEE RIVER SURFACE WATER PLANT DATA

CONTAMINANT	VIOLATION	LEVEL DETECTED	UNIT MEASUREMENT	MCLG	MCL
TOTAL ORGANIC CARBON	NO	RAA Ratio: 1.87 0.61 - 1.70 (Range)	PPM	None	None
TURBIDITY**	NO	0.19***	NTU	None	< 0.3 NTU in 95% of samples per month

** Data reported is for the actual months of operation (March - December 2004) at the surface water plant.

*** Highest single measurement, Lowest monthly percentage meeting standard - 100 percent

ADDITIONAL CCR DATA FOR DISINFECTION

CONTAMINANT	VIOLATION	LEVEL DETECTED	UNIT MEASUREMENT	MRDLG	MRDL	LIKELY SOURCE OF CONTAMINATION
CHLORINE	NO	0.41 - 0.78 **** (Range)	PPM	4.0	4.0	TT

**** Highest Quarterly average

HOW TO READ THIS TABLE

The following definitions are designed to help you understand the data and information presented in the accompanying table.

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.	PPM:	Parts Per Million: The equivalent of one penny in \$10,000 or one minute in two years.
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.	MRDL:	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.
ND:	Non-Detected. No measurable level of a substance or contaminant detected.	MRDLG:	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.
PPB:	Parts Per Billion. The equivalent of one penny in \$10,000,000 or one minute in 2,000 years.	NTU:	Nephelometric Turbidity Unit. Units of measure to indicate water clarity.
90th Percentile:	Of all samples analyzed, 90 percent were at or below the detection level.	TT:	Treatment Technique. Required process intended to reduce the level of a contaminant in drinking water.
AL:	Action Level. The concentration of a contaminant that, if exceeded, triggers treatment or other requirements, which a water system must follow.	RAA:	Running Annual Average. An average of the four quarters from 2004.