

### 2010 WATER QUALITY REPORT

Once again the City of Florence is pleased to report that the drinking water supplied to its customers during the 2010 calendar year met or exceeded all applicable health and safety standards.

"Providing safe drinking water at reasonable cost is a responsibility that the City takes seriously," said David Williams, Florence City Manager. "Our 2010 water quality report shows that the water supplied by the City was, indeed, safe and of optimal quality. State and federal standards for drinking water verify the quality of City water, as shown in the tables included in the report."

To ensure the City's drinking water constantly meets or exceeds the standards set forth in the federal Safe Drinking Water Act, the City of Florence routinely collects sampling data for nearly 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 City of Florence is scientifically analyzed and 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, 2010 through December 31, 2010 shows that the City's drinking water contains only a few of the elements and substances covered by the Safe Drinking Water Act. This sampling data is presented in a table which is included in this report.

#### FLORENCE'S WATER SUPPLY

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 76,000 people including nearly 27,300 residences and more than 3,000 businesses. Approximately 80 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 20 percent of Florence's water supply.

TT Treatment Technique. Required process intended to reduce the level of

Vephelometric Turbidity Unit. Units of measure to indicate water clarity.

MRDLGs do not reflect the benefits of the use of disinfectants

MRDLG Maximum Residual Disinfectant Level Goal. Level of drinking water disinfectant below which there is no known risk to health

disinfectant is necessary for control of microbial contaminants.

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

#### 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 in Room 604 of the City-County Complex. The complex is located at 180 North Irby Street in Florence, S.C. Customers and the public are encouraged to attend these meetings.

## THOSE WITH 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 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 of the City of Florence water quality, please contact Forrest Whittington at (843) 665-3236 or Michael Hemingway at (843) 665-3240.

## YOUR DRINKING WATER: WHAT IT CONTAINS

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 heath 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 at (843) 665-3236.

treatment or other requirements, which a water system must follov

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

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

one minute in 2,000 years.

AL Action Level. The concentration of a contaminant that, if exceeded, triggers

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

water below which there is no known or expected health risk. MCLGs

MCLG Maximum Contaminant Level Goal. The level of contaminant in drinking

MCLCs as feasible using the best available treatment technology.

that is allowed in drinking water. MCLs are set as close to the

MCL Maximum Contaminant Level. The highest level of a contaminant

## 2010 CITY OF FLORENCE WATER QUALITY REPORT



# **Surpassing Water Quality Standards**

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.9625-399 (648)

The delay in obtaining follow-up well samples did not constitute cause a reduction in water quality and did not constitute any threat to public health. Our customers do not need to you would like more information, please contact Michael Hemingway at (843) 665-3240 or Forrest Whittington at

In addition, all subsequent coliform tests (June 2010 through December 2010) on the water system have been negative. The City's re-sampling procedures have now been enhanced to insure that any future required follow-up testing on the water mains and wells will occur within the specified 24 hour time frame.

However, the City is also required to run follow-up tests within 24 hours on water samples obtained from production wells in the area. In this instance, samples were taken from the production wells, but were not obtained within the required 24 hour time period. When the well samples were obtained, they all tested negative for total coliform.

On May 21, 2010, one result form the City's routine bacteriological testing program on its water main system was positive for total coliform. Whenever a positive test occurs, the City is required to run follow-up tests within 24 hours on water samples taken from water mains in the area where the positive test occurred. Three follow-up samples were obtained from the water main system within 24 hours, and all samples tested negative for total coliform.

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

Decay of naturally occurring organic matter		oiaeA AAA 0.1< bashnea	-	04.1 :oinsA AAA	οN	TOC Removal
Byproduct of drinking water chlorination			Mdd	1.10 – 4.70 (Range)	οN	Total Organic Carbon (TOT)
LL	₽	ħ	Mdd	89.0 : AAA 0.52-0.76 (Range)	οN	Shirine
Likely Source of Contamination	MRDL	MRDLG	Jeasurement Unit	Level Detected	Violation	Contaminant
Tollowing of Council and Sulpylin						
aciterimetra () se commo 2 utovii 1				Plant Data	ice Water	Stru2 IsnoifibbA
%00T			UTN	oe.o <b>steO tnsI9</b> '	oN 19 <b>16W 93fe</b> 1	νιιδιότωΤ Stru2 IsnoitibbA
			UTN			Turbidity

 $^{\ast}$  Compliance is based on RAA, not on individual samples.

promotes strong teeth; discharge from fertilizer and aluminum factories						
Corrosion of household plumbing systems; erosion of natural deposits	21=JA	0	PPB	Not Detected	οN	Lead
Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood presetvatives	£.1 = JA	£ <b>.</b> I	Mdd	90th Percentile 0.084 ND - 0.16 (Range)	οN	Copper
Runoff from fertilizer; leaching from septic tanks, sewage; etosion of natural deposits	10	10	Mdd	ND – 0.92 (Range)	٥N	Vitrate/Vitrite
By-product of drinking water chlorination	09	0	bbB	RAA : 5.0 ND – 31.3 (Range)	οN	SAAH (Anloncetic Acids)*
By-product of drinking water chlorination	08	0	PPB	RAA : 16.0 ND – 81.3 (Range)	οN	TTHM (Total Tribalomethanes)*

The following table shows actual sampling results for substances detected in the City of Florence's water system for the period January 1 to December 31, 2010, compared with state and federal health and safety standards for those substances.

2010 Water Quality Sampling Results

## **Additional 2010 Testing Results**

Continuing to provide superior drinking water is a top priority for the City of Florence. With a supreme dedication to providing high-quality drinking water setvice, the City promises its customers 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 Florence's commitment, but is treated.

## **KOOK DRINKING WALER**

Fluoride is a natural element that helps prevent tooth decay, Small amount of fluoride is added duting the water treatment process, as recommended by the American Medical Association (AMA) and the American Dental Association (ADA).

**ELUORIDE**