



# Rock Hill

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## SOUTH CAROLINA

### 2009 Consumer Confidence Report

Water System #4610002

#### A Message from the Director of Utilities

#### The City of Rock Hill Continues To Exceed Drinking Water Regulatory Standards

Through the Safe Drinking Water Act (SDWA), the Environmental Protection Agency (EPA) requires public water systems meet national drinking water standards to ensure that the health of water consumers is carefully protected.

The SDWA requires all public water systems to publish an annual Consumer Confidence Report that explains how these drinking water standards are achieved. The City of Rock Hill's 2009 Consumer Confidence Report provides important information about how your water is treated, tested and distributed, and explains that the water provided to our customers meets and exceeds all federal and state water quality requirements.



The Rock Hill Water Treatment Plant received The 2009 Area Wide Optimization Award presented by the S.C. Department of Health and Environmental Control (SCDHEC). This is a voluntary EPA program which South Carolina adopted to improve drinking water quality beyond regulatory requirements. The Rock Hill Water Plant has earned this award for six consecutive years.



*"Our staff and our drinking water is all about excellence. You demand nothing less. We thank you for your business and continued support."*

On behalf of the City of Rock Hill, I am pleased to present our 2009 Consumer Confidence Report. As this report shows, the City has achieved excellence in the level of the product and services we provide to you. Our success can be directly attributed to the around-the-clock efforts of our highly trained and dedicated treatment plant staff, engineers, and field maintenance technicians.

With a strong commitment to the environment and a keen vision to the future, the City of Rock Hill has invested in a Water Re-use system to irrigate Manchester Meadows, Manchester Village Shops, and the Galleria Mall area. As part of our water conservation effort, the City can recycle the reclaimed water from our water plant, thereby reducing our water withdrawal from Lake Wylie. By using reclaimed water, we are reducing the amount of potable water used for irrigation at various City facilities.

Our Automated Metering Infrastructure (AMI) pilot project area is still being evaluated. We are currently reading and billing over 7,500 water meters through remote reading. AMI enables one-way communications providing data collection and analysis for a continued supply of potable water at a quality level which exceeds expectations. New technology has positioned Rock Hill ahead of the curve, not only in South Carolina, but as an exemplary utility nationwide.

The facade upgrades to the Filter Plant are complete and we hope the plant is a much more appealing part of the drive down Cherry Road. The capacity upgrades finished in 2008 are working well. Permitting is nearly complete to begin upgrading our Lake Wylie Intake to an ultimate capacity of 60 MGD (presently 30 MGD). We completed renovating and upgrading our existing Catawba River Raw Water Intake to provide an additional 6 MGD capacity for peak usage times.

Through the years, the City of Rock Hill has continued to achieve excellence. When it comes to delivering high quality water to the tap, you demand nothing less. Rock Hill Utilities can be counted on to deliver what you demand. We thank you for your business and continued support.

Scott Motsinger  
Director, City of Rock Hill Utilities Department

# Why Water Is Important To You

To ensure that tap water is safe to drink, the EPA prescribes stringent maximum contaminant levels (MCLs) for certain contaminants in water supplied by public water systems.

All sources of drinking water are subject to potential contaminants or man made. All drinking water, including \*bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants in drinking water does not necessarily indicate the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791. You can also visit the EPA's web site at: [www.epa.gov/safewater](http://www.epa.gov/safewater).

The sources of both drinking water and tap water include rivers, lakes, streams, ponds reservoirs, springs and wells. As water travels over land surfaces and underground, it dissolves naturally occurring minerals, radioactive minerals and can pick up substances resulting from the presence of animals and human activity.

Contaminants that might be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, farming, mining, industrial or domestic wastewater discharges or oil and gas production.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff or residential uses.
- Organic chemical, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water results primarily from materials and components associated with service lines and home plumbing.

The City of Rock Hill Utilities is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, one way to minimize the potential for lead exposure is by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

If you are concerned about lead in your drinking water, consider having your water tested for lead levels. The Safe Drinking Water Hotline offers information on lead in drinking water, testing methods, and steps you can take to minimize exposure. Or go online to: <http://www.epa.gov/safewater/lead>.

Removing all contaminants from drinking water would be extremely costly, and in nearly all cases, this would not provide any greater protection of health. In fact, a few naturally occurring substances may actually improve the taste of drinking water and may have low-level nutritional values.

For most customers, water that meets all federal, state and local regulations is considered safe to drink. Some customers may be more vulnerable to contaminants in drinking water than the general population. People with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS and other immune system disorders, and some elderly people and infants can be at particular risk from infection. People with these health concerns should seek advice about drinking water from their health care provider. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available by calling the EPA SAFE DRINKING WATER HOTLINE at 1-800-426-4791.

To understand the possible health effects described for many regulated contaminants, a person would have to drink two liters of water every day at the MCL for a lifetime to have a one-in-a-million chance of having the described health effect.

As required by law, Rock Hill monitors around the clock for contaminants in the drinking water that we treat and supply to our customers. In 2009, Rock Hill performed more than 3,000 system tests at 146 local sites. These tests measure for bacteria, chlorine residual, pH and temperature. Sites include schools, residences, commercial businesses and industries in the Rock Hill water service territory. Along with these routine sites, we perform special monitoring such as lead and copper every three years at 30 designated sites. We also test for corrosion control annually at ten approved sites throughout the City.

Every regulated contaminant detected in the water, even in the most minute traces, is listed in the table, which contains the name of each substance; the highest level allowed by regulation; the ideal goals for public health; the amount detected and the likely sources of contamination. In 2009, there were more than 100 contaminants that were tested for and not detected. (For a list of non-detects, call 803/329-5502.)

\*FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

## Glossary of Terms Referenced in Water Quality Data Table

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

**Detect(ed)** -- Laboratory analysis indicates that a contaminant is present.

**Maximum Contaminant Level (MCL)** -- 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 treatment technology.

**Maximum Contaminant Level Goal (MCLG)** -- The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL)** -- The highest level of disinfectant allowed in finished drinking water.

**Maximum Residual Disinfectant Level Goal (MRDLG)** -- The level of disinfectant below which there is no known or expected risk to health. MRDLGs allow for a margin of safety.

**Nephelometric turbidity units (Ntu)** -- The unit of measure for measuring turbidity.

**Parts per billion (ppb) or micrograms per liter** -- One part per billion corresponds to a single penny in \$10 million.

**Parts per million (ppm) or milligrams per liter (mg/l)** -- One part per million corresponds to a single penny in \$10,000.

**Piocuries per Liter (pCi/L)** -- A measure of the radioactivity in water.

**Treatment Technique (TT)** -- A required process intended to reduce the level of a contaminant in drinking water.

**Turbidity** -- The degree of cloudiness due to particles suspended in water.

# 2009 WATER QUALITY DATA TABLE

## REGULATED CONTAMINANTS

### MICROBIOLOGICAL CONTAMINANTS

Contaminant	Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest Number of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total Number of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
Coliform Bacteria	0	5% of monthly samples are positive	1.3	0	0	No	Naturally present in the environment
Contaminant	Limit (Treatment Technique)				Level Detected	Violation	Likely Source of Contamination
Turbidity	1 NTU		Highest Single Measurement		0.29 NTU	No	Soil runoff
	0.3 NTU		Lowest Monthly Percentile		100%	No	Soil runoff

### INORGANIC CONTAMINANTS

Contaminant	Year	MCLG	MCL	Units	Highest Level Detected	Range of Levels Detected	Violation	Likely Source of Contamination
Nitrate (measured as Nitrogen)	2009	10	10	ppm	0.21	0.21 - 0.21	No	Leaching from septic tanks, sewage; erosion of natural deposits
Fluoride	2009	4	4.0	ppm	0.7	0.66 - 0.66	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Contaminants Lead & Copper	Year	MCLG	Action Level (AL)	Units	90th Percentile	Number of sites over AL	Violation	Typical Source
Copper - action level at consumer taps	2008	1.3	1.3	ppm	0.048	0	No	Corrosion of household plumbing systems; erosion of natural deposits

### CONTAMINANTS RELATED TO DISINFECTANTS & DISINFECTANT BY-PRODUCTS

Contaminant	Year	MCLG	MCL	Units	Highest Level Detected	Range of Levels Detected	Violation	Likely Source of Contamination
Total Organic Carbon	2009	TT	TT	ppm		2.2 - 3.8	No	Naturally present in the environment
Chlorine (as CL2)	2009	4	4	ppm		1.0 - 1.5	No	Water additive used to control microbes
Chlorine Dioxide (as CL02)	2009	0.8	0.8	ppm		0 - 0.3	No	Water additive used to control microbes
Chlorite	2009	0.8	0.8	ppm		.04 - .59	No	By-Product of drinking water disinfection
TTHMs (total Trihalomethanes)*	2009	No goal for the total	80	ppb	57	27.68 - 70.3	No	By-Product of drinking water disinfection
Haloacetic Acids (HAA5)*	2009	No goal for the total	60	ppb	41	16.29 - 49.79	No	By-Product of drinking water chlorination

\* Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

### RADIOACTIVE CONTAMINANTS

Combined Radium (226/228)	2007	0	5	pCi/L	0.064	0.064 - 0.064	No	Erosion of natural deposits
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## UNREGULATED CONTAMINANTS

Contaminant	Year	MCLG	MCL	Units	Highest Level Detected	Range of Levels Detected	Violation	Likely Source of Contamination
Sodium (optional)	2009	not regulated	not regulated	ppm	7	7.0 - 7.0	No	Leaching

# Information About Rock Hill's Drinking Water Source

The City of Rock Hill water system is located in York County, South Carolina in the Catawba-Santee Basin(s) and serves a primary population of approximately 60,000. Rock Hill treats and distributes water to retail customers in the Rock Hill area and provides water to wholesale customers such as the Town of Fort Mill, the River Hills community, portions of York county, the Catawba Indian Nation and a small number of private water suppliers in the area.

The drinking water sources for the system are surface water intakes at the Catawba River/Lake Wylie in the northeast portion of the county. Water is then pumped to the Cherry Road treatment plant. There, conventional chemical disinfection and treatment processes produce

the water you consume. Access to our raw water intake and treatment plant is highly restricted and closely monitored around the clock.

The South Carolina Department of Health and Environmental Control (SCDHEC) serves as coordinating agency for the State's Source Water Assessment and Protection Program (SWAP), a program required by EPA's 1996 amendments to the Safe Drinking Water Act. SWAP provides added protection of our water by conducting assessments for all drinking water sources across South Carolina and implementing safeguard measures.

In 2003, SCDHEC completed the City of Rock Hill's Source Water Assessment. The assessment provides an inventory of potential contaminant sources (PCSs),

identifies potential contaminants of interest and ranks the potential susceptibility of these PCSs with respect to the water source. SCDHEC has identified Rock Hill's source water to be susceptible to contaminants such as volatile organic contaminants, petroleum products, metals, nitrates, pesticides and herbicides. The City of Rock Hill continually monitors for the presence of these contaminants, and through state-of-the-art disinfection techniques, delivers safe drinking water to its customers.

For a complete copy of this assessment report, contact Susan Featherstone at 803-329-5502 or visit SCDHEC online: <http://www.scdhec.net/environment/water/srcewtrreports.htm>.



## DIRECTORY

The City's water system is governed by Rock Hill City Council and operated by the Utilities Department under the supervision of City Management.

Doug Echols, Mayor

Susie B. Hinton, Councilmember Ward 1

Kathy Pender, Councilmember Ward 2

Kevin Sutton, Councilmember Ward 3/Mayor Pro Tem

John A. Black, III, Councilmember Ward 4

Osbey Roddey, Councilmember Ward 5

Jim Reno, Councilmember Ward 6

Carey F. Smith, City Manager

Gerald E. Schapiro, Assistant City Manager

David B. Vehaun, Assistant City Manager

Finance Director/City Clerk

James G. Bagley, Jr., Public Services Administrator/CIO

Scott Motsinger, Utilities Director

Susan Featherstone, Water Treatment Plant Superintendent

Rock Hill City Council meets on the second and fourth Monday of each month at 6:00 p.m. Council meetings are broadcast live and re-aired on Rock Hill's government access channel, RHTV19.

Website: [www.cityofrockhill.com](http://www.cityofrockhill.com)

Customer Service, Utility Bill Questions: **803-325-2500**

24-Hour Automated Service: **803-329-5500**

Rock Hill Water Treatment Plant: **803-329-5502**

Utilities Department: **803-329-5500**

City Council/Meeting Information: **803-329-7012**

TDD for Hearing Impaired: **803-329-8787**

EPA Safe Drinking Water Hotline: **1-800-426-4791**

Palmetto Utility Protection Service (PUPS) - "Call Before You Dig":

**Dial "811" or call toll free 1-888-721-7877**



**Know what's below.  
Call before you dig.**

Spanish Line: **803-325-2537**

*\*EN ESPAÑOL: Este informe contiene información importante acerca de su agua potable. Por favor, haga que alguien lo traduzca para usted, o hable con alguien lo entienda. Gracias.*