



CITY OF UNION

2012 CONSUMER CONFIDENCE REPORT



Water Quality Results
System ID # 4410001

The sampling data shows that the water provided to *City of Union* customers met the Safe Drinking Water Act regulation.

A total of 114 **regulated** health effect contaminants, including pesticides and metals, were analyzed in our source water. Critical contaminants are analyzed on a **frequent basis**. One hundred five (105) regulated contaminants were **not** detected through analyses. The nine (9) contaminants (including unregulated contaminants) that were detected during the sampling period of 2012 are listed below.

Regulated Substances Detected in Finished Drinking Water

Substance	MCL	MCLG	Range	HDL	VIOLATION	Source	Yr. Of Analysis
Chlorine	4 ppm	4 ppm	1.03 – 1.92 ppm	1.61 ppm (RAA)	NO	Disinfection	2012
Fluoride*	2 ppm	4 ppm	N/A	.60 ppm	NO	Erosion of natural deposits; water additive which promotes strong teeth	2012
Haloacetic Acids (HAAs) **	60.0 ppb	N/A	12 – 55 ppb	27.0 ppb (RAA)	NO	Byproduct of chlorination	2012
Nitrate	10 ppm	10 ppm	N/A	0.32 ppm	NO	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits	2012
Total Organic Carbon***	TT	N/A	39.0% – 55.3% (Removal)	45.6.0% (Level Found)***	NO	Naturally present in the environment	2012
Turbidity	TT	N/A	N/A	0.12 ntu 100 % ****	NO	Soil Runoff	2012
Total Trihalomethane (TTHM)	80 ppb	N/A	34 – 112 ppb	72.0 ppb (RAA)	NO	Byproduct of chlorination	2012

* EPA's MCL for fluoride is 4 ppm; however, our state has set a lower MCL to better protect human health.

** Quarterly sampling results for multiple sampling sites

***35% removal required. 100% of all samples met Total Organic Carbon requirements. Samples are taken monthly.

****100 % of all samples met turbidity requirements

Lead and Copper Compliance

Substance	MCL	MCLG	Range of Detection	90 th Percentile	Source	Year Of Analysis
LEAD	15 ppb	0	ND	0.0 ppb*	Corrosion of home piping	2010
COPPER	1.3 ppm	1.3 ppm	0.017-0.34 ppm	0.270 ppm*	Corrosion of home piping	2010

* **NO** site tested exceeded the action level for copper. * Lead was not detected at any site tested.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women & young children. Lead in drinking water is primarily from materials & components associated with service lines and home plumbing. The City of Union 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, you can minimize the potential for lead exposure 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 water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or an <http://www.epa.gov/safewater/lead>. We have been monitored for the Unregulated Contaminant Monitoring Regulation 2(UCMR2) in 2010. No detections were noted. If you would like to receive the list of contaminants monitored, please contact *Arnold Franklin* at 864-429-1707.

The abbreviations used above are defined as:

Action Level = The concentration of a contaminant that triggers treatment or other requirements that a water system must follow. Action Levels are reported at the 90th percentile to homes at greatest risk.

HDL = Highest Detected Level

MCL = Maximum Contaminant Level – The highest level of the contaminant that is allowed by the current regulations

MCLG = Maximum Contaminant Level Goal – The level of a contaminant in drinking water below which there is no known or expected health risk

N/A = Not applicable or data not available

N/D = Not detected

NTU = Nephelometric Turbidity Units; measures the clarity of water. An excess of 5 NTU is just noticeable to the average person.

PCS = Potential Contaminant Source

pCi/L = Picocuries per liter is a measure of the radioactivity in water

ppb = parts per billion (Corresponds to 1 minute in 2,000 years, or a single penny in \$10,000,000).

ppm = parts per million (Corresponds to 1 minute in 2 years, or a single penny in \$10,000)

RAA = Running Annual Average

TT = Treatment Technique – a required process intended to reduce the level of a contaminant in drinking water

What if I have questions about my water or this report?

If you would like more information about your water quality, the water treatment process, or information in this report, please contact *Arnold Franklin* at 864-429-1707.



Information about Drinking Water Quality

1. All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganics or organic chemicals and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants **does not** necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPAs) Safe Drinking Water Hotline at 1-800-426-4791.
2. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium are available from the Safe Drinking Water Hotline at 1-800-426-4791.

3. Contaminants that may 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

What is the source of my water?

The raw water source for the *City of Union* is the Broad River.

Source water protection is the first line in preventing drinking water contamination and the cornerstone of efforts to save future costs in treatment and possible replacement of local water supplies. We encourage you to do your part to protect this precious water supply.

The Source Water Assessment Plan is available for your review on the internet.
<http://www.scdhec.gov/environment/water/docs/Unionswp/4410001s.pdf>

How is my water treated?

The City uses the Environmental Protection Agency and SCDHEC approved methodologies for making sure your water meets all health requirements. The water is chemically treated to remove solids and other harmful contaminants and to kill disease-producing organisms. The water is then filtered to further enhance the clarity and to remove small particles and microbes such as giardia and cryptosporidium. Additional chemicals are added to stabilize the water and inhibit corrosion in the pipeline distribution systems.

This Water Quality Report is for the calendar year 2012. The information in this report was assembled from various sources such as (1) our own laboratory data, (2) commercial laboratory results and (3) the South Carolina Department of Health and Environmental Control (SCDHEC) laboratory results.

What did the City of Union do to improve your system in 2012?

Flushed and tested fire hydrants on the City's distribution system.

Several water lines were replaced within the distribution system.

The City of Union tests the water for a wide range of contaminants constantly to ensure that you and your family have plenty of clean, safe drinking water. We will continue to provide these safeguards now – and in the future.

In 2009 we completed sampling for cryptosporidium and giardia. None were detected in our water.

The City has continued to receive the AWOP award by SC DHEC since 2001. AWOP is an effort to optimize the performance of existing surface water treatment facilities. The goal of the program is to optimize particle removal and disinfection at all filtration plants to maximize public health protection. It was originally focused on microbial contaminants, but has expanded to include a disinfectant byproducts component. It reduces the risk of a waterborne disease outbreak.

Receiving the AWOP award continuously for eleven (11) years demonstrates the City's commitment to providing drinking water that exceeds all regulatory requirements while protecting public health in the process.

Water is our most precious resource. Safe drinking water is essential to community quality of life and to economic growth.

At this time, Union County remains under the Moderate Drought Status. Please do your part to conserve water.



Sincerely,

A handwritten signature in blue ink that reads "Harold E. Thompson".

Mayor Harold E. Thompson

The *Union City Council* meets the third Tuesday of each month @ 6:30 p.m.