CITY OF UNION

2018 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 twenty-four (24) contaminants (including unregulated contaminants) that were detected during the sampling period of 2018 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	1.08 – 2.16 ppm	1.64 ppm (RAA)	NO	Disinfection	2018
Fluoride*	2 ppm	4 ppm	N/A	.31 ppm	NO	Erosion of natural deposits; water additive which promotes strong teeth	2018
Haloacetic Acids (HAAs) **	60.0 ppb	N/A	7 – 28 ppb	21.0 ppb (LRAA)	NO	Byproduct of chlorination	2018
Nitrate	10 ppm	10 ppm	N/A	0.34 ppm	NO	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits	2018
Sodium	NA	NA	NA	8.8 mg/l	NO	Erosion of natural deposits	2018
Total Organic Carbon***	TT	N/A	35.1% – 58.7% (Removal)	44.8% (Level Found)***	NO	Naturally present in the environment	2018
Turbidity	TT	N/A	N/A	0.06 ntu 100 % ****	NO	Soil Runoff	2018
Total Trihalomethane (TTHM)	80 ppb	N/A	12 – 81 ppb	50.0 ppb (LRAA)	NO	Byproduct of chlorination	2018

* EPA's MCL for fluoride is 4 ppm. The Federal Secondary Maximum Contaminant Level for Fluoride which is 2 ppm which is also in our State Regulation.
** 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	90th Percentile	Source	Year Of Analysis
Lead	15 ppb	0	0.00 – 0.005	0.0017 ppb*	Corrosion of home piping	2016
Copper	1.3 ppm	1.3 ppm	0.000-0.31 ppm	0.220 ppm*	Corrosion of home piping	2016

* NO site tested exceeded the action level for copper. * Lead was detected at one 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. Lead and copper compliance sampling is scheduled again in the summer of 2019.

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
LRAA = Locational Running Annual Average
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.
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
µg/L = micrograms per liter One thousand micrograms per liter is equivalent to 1 milligram per liter. This measure is equivalent to parts per billion (ppb) (Corresponds to 1 minute in 2,000 years, or a single penny in $10,000,000)

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.

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

Unregulated Contaminant Monitoring Regulation (UCMR3) (UCMR4)

We were monitored for the Unregulated Contaminant Monitoring Regulation (UCMR3) in 2014-2015 and (UCMR4) IN 2018 and monitoring continuing through May 2019.

Unregulated contaminants are those that don't yet have a drinking water standard set by the EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customer, you have a right to know the results.

Listed below are the contaminants that were found. For more information about the contaminants listed you can view the EPA Fact sheet at http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/.

UCMR 3 Contaminants	Range of Detection (µg/L)	Highest Detection
Chromium (Total)	0.039 – 0.076	0.076 ug/L
Molybdenum	0 – 12	12 ug/L
Strontium	0 – 41	41 ug/L
Vanadium	0 – 0.84	0.84 ug/L
1,4-Dioxane	0.12 – 0.33	0.33 ug/L
Chlorate	93 - 170	170 ug/L
UCMR 4 Contaminants	**Range of Detection (µg/L)**	**Highest Detection**
Bromide	25.9 – 42.0	42.0 ug/L
Total Organic Carbon (TOC)	1810 - 2270	2270 ug/L
Bromochloracetic acid	1.33 – 6.82	6.82 ug/L
Bromodichloracetic acid	1.3 – 4.40	4.40 ug/L
Chlorodibromoacetic acid	0 – 0.625	0.625 ug/L
Dibromoacetic acid	0 – 0.733	0.733 ug/L
Dichloroacetic acid	4.21 – 24.9	24.9 ug/L
Trichloroacetic acid	6.53 – 16.6	16.6 ug/L

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-comprised 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. Source water assessment documents are available at www.scdhec.net/water or by calling (803) 898-4300. We encourage you to do your part to protect this precious water supply.

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 microbials 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 2018. 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 2018?

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 2017 we completed sampling for cryptosporidium and giardia.

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 seventeen (17) years demonstrates the City's commitment to providing drinking water that exceeds all regulatory requirements while protecting public health in the process.

Safe drinking water is essential to community quality of life and to economic growth. Please do your part to conserve water.

Este informe contiene informacion muy importante sobre el aqua que usted bebe. Traduzcalo o hable con alguien que lo entienda bien.

Sincerely,

Mayor Harold E. Thompson