

# ANNUAL DRINKING WATER QUALITY REPORT FOR 2016

Crawford Mills

210 –W. North 2<sup>nd</sup> Street, Seneca SC 29678

## CONSUMER CONFIDENCE REPORT

On August 6, 1998, the Environmental Protection Agency (EPA) published the Consumer Confidence Report regulation. This rule requires public water systems to publish an annual report for distribution to their customers which gives detailed information about water sources, water treatment, water quality and regulatory compliance. The report for each year will be sent by July 1<sup>st</sup> of the next year.

## SOURCE WATER INFORMATION

Crawford Mills purchases water from the City of Clemson for distribution to residential and commercial customers. The City of Clemson's water source is supplied by surface water from the U.S. Army Corps of Engineers Hartwell Lake Reservoir. The water from Lake Hartwell Reservoir is purchased from Anderson Regional Joint Water System (ARJWA). For a copy of the City of Clemson's CCR, please visit their website, [www.cityofclemson.org](http://www.cityofclemson.org).

The Department of Health and Environmental Control (SCDHEC) conducted a Source Water Assessment Plan (SWAP) for the City of Clemson in May of 2003. The assessment includes a list of all potential contamination sources. For more information visit [www.scdhec.gov/environment/water/srcwtrreports.htm](http://www.scdhec.gov/environment/water/srcwtrreports.htm) or if you do not have internet access, please contact Bureau of Water in Columbia, SC at (803)898-4300 to arrange to view this document.

## CHEMICAL MONITORING

Public water systems are required to monitor their drinking water for a large number of chemical contaminants. These include inorganic chemicals, synthetic organic chemicals, volatile organic chemicals, disinfection byproducts, and radioactive contaminants. For some of these contaminants, EPA has established and South Carolina Department of Health & Environmental Control (SCDHEC) has adopted maximum contaminant levels (MCLs) and maximum contaminant level goals (MCLGs). These contaminants are referred to as regulated contaminants. For other contaminants, EPA and SCDHEC require monitoring as a means of building a base of occurrence data, but there are not at this time any enforceable limits on the concentration of these contaminants. These are referred to as unregulated contaminants.

We are required to report only those contaminants which have been detected during the calendar year 2016, or in the most recent sample taken for parameters measured less frequently than once per year. The information must include the contaminant name, the MCLG and MCL, the highest

level found and the range of measurements if multiple samples were taken, and typical source or sources of the contaminants detected.

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. 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 Safe Drinking Water Hotline at **(1-800-426-4791)**.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. DDA regulations establish limits for contaminants in bottled water which must provide the same protection public health.

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/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline **(1-800-426-4791)**.

### **REQUIRED LEAD AND COPPER INFORMATION**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Seneca 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 drinking 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 at <http://www.epa.gov/safewater/lead>.

If you have questions about this report, please contact Miranda Roper at (864) 882- 8194.

### **Total Coliform Monitoring**

The bacteriological sampling for the Crawford Mills for year 2016 showed no Total Coliform or E.coli present.

**REGULATED SUBSTANCES DETECTED**

**Crawford Mills (CM), City of Clemson (COC) and Anderson Regional Joint Water System (ARJWS)**

| Substance / Units           | MCL                       | MCLG | Highest Level Detected        | Range of Levels Detected | Date of Sample | Violation | Typical Source                                                                                                            |
|-----------------------------|---------------------------|------|-------------------------------|--------------------------|----------------|-----------|---------------------------------------------------------------------------------------------------------------------------|
| Fluoride / ppm              | 4                         | 4    | 0.52 (ARJWS)                  | 0.03– 0.52 (ARJWS)       | 2016           | None      | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Total Nitrate / (ppm)       | 10                        | 10   | 0.24 (ARJWS)                  | 0.24 (ARJWA)             | 2016           | None      | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits                               |
| Turbidity (NTU)             | TT = 1                    | NA   | 0.06 (ARJWS)                  | 0.03 to 0.06 (ARJWS)     | 2016           | None      | Soil runoff. Turbidity is a measure of the cloudiness of water.                                                           |
|                             | TT= <0.3 95 % of the time |      | 100% of samples are below MCL |                          |                |           |                                                                                                                           |
| Total Trihalomethanes (ppb) | 80                        | 0    | 40 (CM)                       | 39.8 to 40.0 (CM)        | 2016           | None      | By-product of drinking water disinfection                                                                                 |
| Haloacetic Acids (ppb)      | 60                        | 0    | 27.0 (CM)                     | 26.1 to 26.8 (CM)        | 2016           | None      | By-product of drinking water disinfection                                                                                 |
| Total Organic Carbon        | MRDL TT                   | NS   | 2.30 (ARJWS)                  | 1.15 to 2.30 Removal     | 2016           | None      | Naturally present in the environment                                                                                      |

**PARAMETERS OF RESIDUAL CHLORINE  
(Crawford Mills Testing Results – Calendar Year 2016)**

| Substance / Units       | MCLG                      | MCL      | Average Level Found | Range of Levels Found | Date of Sample | Was MCL exceeded | Typical Source                          |
|-------------------------|---------------------------|----------|---------------------|-----------------------|----------------|------------------|-----------------------------------------|
| Residual Chlorine / ppm | MRDLG = 4                 | MRDL = 4 | 1.05                | 0.93 to 1.23          | 2016           | None             | Water additive used to control microbes |
| Total Coliform Bacteria | 1 Positive Monthly Sample |          | 0 Samples Positive  | 0                     | 2016           | None             | Naturally present in the environment    |

**PARAMETERS OF THE LEAD AND COPPER RULE  
(Crawford Mills Testing Results – Calendar Year 2016)**

| Contaminant /Unit | Action Level (AL) | 90 <sup>th</sup> Percentile Value | No. of Sample Sites Exceeding (AL) | Likely Source of Contamination                                                                         |
|-------------------|-------------------|-----------------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------|
| Lead / ppb        | 15 ppb            | 0.0                               | 0                                  | Corrosion of household plumbing systems; Erosion of natural deposits                                   |
| Copper / ppm      | 1.3 ppm           | 0.014                             | 0                                  | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives |

**What do all those symbols mean?**

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

NTU – Nephelometric Turbidity Units – A measure of water clarity

N/A – Not Applicable

NR – Not Required

Running Annual Average (RAA) – Average based on the four most recent quarterly average.

Non-Detects (ND) – laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) – one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (ug/l) – one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Action Level (AL) – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (MCL) – The “Maximum Allowed” is 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.

Maximum Contaminant Level Goal (MCLG) – The “Goal” is the level of a 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 a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) – The level of a drinking water disinfectant below which there is no known or expected risk to health.

**Consumer Confidence Report  
For  
Water Customers**