

# **ANNUAL DRINKING WATER QUALITY REPORT FOR 2016**

**HighPointe of Clemson**

**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**

HighPointe at Clemson purchases water from the City of Seneca for distribution to residential and commercial customers. The City of Seneca source of water is Lake Keowee. It is a man-made surface water source, created by Duke Energy, which is treated at the water treatment plant located on the southern end of the lake, off Northhampton Road in Seneca, SC. For a copy of the City of Seneca's CCR, please visit their website at [www.seneca.sc.us](http://www.seneca.sc.us).

The Department of Health and Environmental Control (SCDHEC) conducted a Source Water Assessment Plan (SWAP) for the City of Seneca in April 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 the City of Seneca at (864) 885-2735 to arrange to view this document.

## **TREATMENT/STORAGE**

After treatment and disinfection the water meets all current State and federal drinking water standards. Storage facilities presently consist of three (3) ground storage clear wells and eight elevated tanks with a total capacity of 6.5 million gallons.

## **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>.

The bacteriological sampling for the HighPointe of Clemson for year 2016 showed no Total Coliform or E.coli present.

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

**REGULATED SUBSTANCES DETECTED**  
**City of Seneca (COS) and Highpointe of Clemson (HP)**

Substance / Units	MCL	MCLG	Highest Level Detected	Range of Levels Detected	Date of Sample	Violation	Typical Source
Fluoride / ppm	4	4	0.90 (COS)	NA (COS)	3/31/2016	None	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Total Nitrate / (ppm)	10	10	0.040 (COS)	NA (COS)	3/31/2016	None	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Turbidity (NTU)	TT = 1	NA	0.13 (COS)	0.05 to 0.08 (COS)	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	58 (HP)	27.5 to 77.2 (HP)	2016	None	By-product of drinking water disinfection
Haloacetic Acids (ppb)	60	0	26 (HP)	18.7 to 33.4 (HP)	2016	None	By-product of drinking water disinfection
Total Organic Carbon	MRDL TT	NS	NR (COS)	Required Parameters were met	2016	None	Naturally present in the environment

**PARAMETERS OF RESIDUAL CHLORINE**  
**(HighPointe of Clemson 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	1.2	1.0 to 1.2	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**  
**(HighPointe of Clemson Testing Results – Calendar Year 2012)**

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	ND	No sites exceeded the action level. (20 sites sampled)	Corrosion of household plumbing systems; Erosion of natural deposits
Copper / ppm	1.3 ppm	0.03 Range ND to 0.17	No sites exceeded the action level. (20 sites sampled)	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

**UNREGULATED CONTAMINANT MONITORING RULE 3 (UCMR3)**

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of certain contaminants in drinking water and whether it needs to regulate those contaminants in the future. The City of Seneca was monitored for three quarters by SCDHEC for unregulated contaminants in the calendar year 2014.

UNREGULATED CONTAMINANTS					
Contaminant (Units)	MCLG	MCL	Level Detected	Sample Date	Typical Sources
Strontium (ppb)	Undetermined	NA	Water Plant: 8.8 – 9.8 Distribution System: 9-12	2014	Naturally-occurring element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions.
Vanadium (ppb)	Undetermined	NA	Water Plant: ND-0.25 Distribution System: ND – 0.29	2014	Naturally-occurring element and is commonly used as vanadium pentoxide in the production of other substances and as a catalyst.
Chromium-6 (ppb)	Undetermined	NA	Water Plant: ND-0.1 Distribution System: 0.071 – 0.17	2014	Naturally-occurring element used in making steel and other alloys; chromium-3 or chromium-6 are used for chrome plating, dyes and pigments, leather tanning, and wood preservation.
Chromium (Total) (ppb)	100	100	Water Plant: ND Distribution System: ND	2014	Naturally-occurring element used in making steel and other alloys; chromium-3 or chromium-6 are used for chrome plating, dyes and pigment, leather tanning, and wood preservation.
Chlorate (ppb)	NA	Undetermined	Water Plant: ND-0.25 Distribution System: 9-12	2014	Agricultural defoliant or desiccant; disinfection by-product; and used in the production of chlorine dioxide.

\*Monitoring for total chromium – in conjunction with UCMR3 Assessment Monitoring- is required under the authority provided in Section 1445(a)(1)(A) of SDWA.

**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**

