2017 Annual Drinking Water Quality Report

Cassatt Water

Kershaw County and Lee County Regional Water Authority

2638 Old Stagecoach Road, Cassatt, S.C. 29032 803 432-8235 www.cassattwater.com

South Carolina Public Water System No. SC2820005

The U.S. Environmental Protection Agency (USEPA) requires that all water utilities provide their customers with annual drinking water quality reports, as mandated by the 1996 Amendments to the Safe Drinking Water Act. This report provides Cassatt Water Customers with information regarding your drinking water consumption and can help you and your family to make health-related decisions.



We're pleased to present to you the 2017 Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

What are the sources of my drinking water?

The majority of water distributed by Cassatt Water is ground water obtained from twelve (12) wells located in Lee County and Kershaw County within the Cassatt Water service area.

Additionally, some water is purchased from The City of Camden and the Alligator Rural Water & Sewer Company, Inc. The source of water purchased from the City of Camden is Lake Wateree and is treated at the City's surface water treatment plant off of John G. Richards Road. The water purchased from Alligator Rural Water and Sewer is groundwater from nine (9) deep wells in the McBee, S.C. area and treated at their water treatment facility in McBee.

SCDHEC performed a Source Water Assessment for public water systems in 2003. The report for the assessment is available for review. Contact James Ferguson at 803 898-3531 or by e-mail at FERGUSJM@dhec.sc.gov to review or get a copy of the document. A copy of the document is available for review at Cassatt Water, 2638 Old Stagecoach Road, Cassatt SC 29032.



Are there contaminants in my drinking water?

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. These type substances are listed below:

- Microbial contaminants, such as viruses and bacteria that 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, 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, stormwater runoff, and residential uses.
- Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of
 industrial processes and petroleum production, and can also come from gas station, 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.

All drinking water, including bottled water, may reasonably be expected to contain at least a small amount 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 that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.



New Sycamore Road Booster Pump Station

What are the dangers of lead in drinking water?

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. Cassatt Water 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 at 800 426-4791 or at http://www.epa.gov/safewater/lead.

Do I need to take special precautions?

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 their health care providers about drinking water. 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.



Inside the new Sycamore Rd. Booster Pump Station

What Does It All Mean?

(terms used in the following Water Quality Data Tables)

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

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 (μ g/l)- one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or nanograms per liter (ng/l)- one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Picocuries per liter (pCi/L) – Picocuries per liter is a measure of the radioactivity in water.

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 available treatment technology. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Maximum Contaminant Level Goal (MCLG) 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.

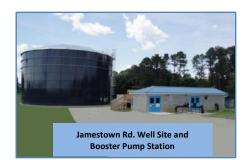
Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants. **Maximum Residual Disinfectant Level Goal (MRDLG)** – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

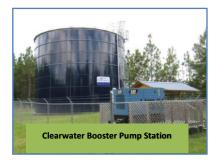
Nephelometric Turbidity Unit (NTU) – Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Locational Running Annual Average (LRAA) – The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

Total Organic Carbon (TOC) Removal – The percent removal must be at least 1 or the system is in violation. **Treatment Technique (TT)** – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.









Water Quality Data Tables

Kershaw County and Lee County Regional Water Authority (Cassatt Water) routinely monitors for contaminants in your drinking water in accordance with Federal and State laws. The tables below show the results of our monitoring for the period of January 1, 2017 to December 31, 2017.

Cassatt Water

Inorganic Contaminants (Year Tested)	Average Level and Range Detected*	Units	MCLG	MCL	Violation Yes/No	Likely Source of Contamination			
Unless otherwise noted, the highest value of the range detected is the maximum value of <u>individual</u> samples collected.									
Nitrate (measured as Nitrogen) (2017)	0.77 0 – 2.5*	ppm	10	10	No	Runoff from fertilizer use; Leaching from septic tanks; Sewage; Erosion of natural deposits			
Mercury (2017)	1.6 1.5 – 1.8*	ppb	2	2	No	Discharge from refineries and factories; Erosion of natural deposits; Runoff from landfills: Runoff from cropland			
Radioactive Contaminants (Year Tested)	Average Level and Range Detected*	Units	MCLG	MCL	Violation Yes/No	Likely Source of Contamination			
Gross Alpha Excluding Radon & Uranium (2017)	4.4 3.1 – 5.2*	pCi/L	0	15	No	Erosion of natural deposits			
Combined Radium 226/228 (2017)	3.2 1.8 – 4.4*	pCi/L	0	5	No	Erosion of natural deposits			
Disinfection Chemical(s) (Year Tested)	Highest Quarterly Levels Range of Quarterly Levels Range Detected*	Units	MRDLG	MRDL	Violation Yes/No	Likely Source of Contamination			
Chlorine (2017)	0.64 0.49 - 0.82 0.18 - 2.2*	ppm	4	4	No	Water additive used to control microbes			
Disinfection By-Products (Year Tested)	Highest LRAA Range of LRAA's Range Detected*	Units	MCLG	MCL	Violation Yes/No	Likely Source of Contamination			
Total Trihalomethanes TTHM (2017)**	2 0 - 2 0 - 4.82* *3 rd Qrt. at DP-2 T&T Tractor-197	ppb	No goal for the total	80	No	By-product of drinking water disinfection			

Cassatt Water (Continued)

Disinfection By- Products (Continued) (2016)	HIGHEST LRAA Range LRAA's Range Detected*	Units	MCLG	MCL	Violation Yes/No	Likely Source of Contamination
Haloacetic Acids(HAA5)** (2017)	1*** 0 – 1 0 – 0	ppb	No goal for the total	60	No	By product of drinking water disinfection

^{**}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.

^{***}Although 2017 did not have any detections, the 1st Qtr. of 2017 had a LRAA of 1. The LRAA for the 1st Qtr. of 2017 was calculated using data from the 2nd, 3rd, and 4th Qtr.'s of 2016 and the 1st Qtr. of 2017.

Lead and Copper (Date Sampled)	Level Detected	Units	MCLG	MCL	# Sites Over AL	Violation Yes/No	Likely Source of Contamination
Copper (07/27/2015)	90 th Percentile 0.19	ppm	1.3	AL = 1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits: Leaching from wood preservatives
Lead (07/27/2015)	90 th Percentile 0	ppb	0	AL = 15	1	No	Corrosion of household plumbing systems; Erosion of natural deposits.

Unregulated Contaminates Detection (Year Sampled)	Collected at Source ID	Site Description	Highest Level, Range Detected* and Average	Units	Major Sources in Drinking Water
Methyl Tert-Butyl Ether (MTBE) (2017)	B28018	Plant Well (G28214) 1953 Cassatt Road	11 0 – 11* 7.9*	ppb	Octane enhancer in unleaded gasoline.

Samples collected on 2/23/2017, 5/11/2017,8/17/2017 and 11/20/2017

Unregulated contaminants monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminates.

The City of Camden

Contaminants (Date Sampled)	Highest Level and Range Detected	Units	MCLG	MCL	Violation Yes/No	Likely Source of Contamination		
Fluoride (2017)	0.41 0.41 – 0.41	ppm	4	4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories		
Nitrate (as Nitrogen) (2017)	0.88 0.88 – 0.88	ppm	10	10	No	Runoff from fertilizer: Leaching from septic tanks, sewage: Erosion of natural deposits		
Chlorobenzene* (2016)	0.70 0 – 0.70	ppb	100	100	No	Discharge from chemical and agricultural factories		
*Chlorobenzene was not detected in 2017								

Alligator Rural Water & Sewer Company

Inorganic Contaminants (Year Sampled)	Highest Level and Range Detected	Units	MCLG, or MRDLG	MCL TT, or MRD	Violation Yes/No	Likely Source of Contamination
Nitrate (measured as Nitrogen) (2017)	1.5 0 – 1.5	ppm	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, Sewage: Erosion from natural deposits



Source Water Protection Tips for Consumers

Protection of drinking water is everyone's responsibility. The aquifer that supplies the groundwater to the wells that Cassatt Water distributes to its customers can be contaminated. Contamination caused by farm runoff of fertilizers, herbicides, and pesticides, farm animal waste, abandoned irrigation wells, gas stations, automobile repair shops, industrial discharges, leaking underground storage tanks, leaking sewer pipes, sewer overflows, etc. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides. They contain hazardous chemicals that can reach your drinking water.
- Pick up after your pets.
- If you have a septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public sewer system, if available.
- Dispose of chemicals properly; take used motor oil to a recycling center.



New Hwy. 97 Elevated Tank (2016)

The Board of Commissioners of the Kershaw County and Lee County Regional Water Authority meets on the third Monday of each month. All meetings begin at 2:00 pm and are held at the offices located at 2638 Old Stagecoach Road, Cassatt S.C. 29032. The public is welcome to attend.

The Cassatt Water website at www.cassattwater.com provides a wealth of information such as: billing and payment information; list of commission members; authority policies; important notices; water rates and fees; establishing water service; water quality reports; commission meeting dates; holiday schedule; and employment opportunities.

ANY QUESTIONS?

If you would like to know more about the information provided in this report, please contact Joe Parsons at 803 432-8235 ext. 118 or by e-mail at iparsons@cassattwater.com. He will be glad to answer any questions you might have. Also, you can find additional information concerning drinking water on the EPA's website (www.epa.gov/safewater/).







