# **2022 Water Quality Detection Levels and Sources**

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Contaminant	MCLG	MCL	Your Water	Range (Low to High)	Sample Date	Violation?	Typical Source of Contaminant
Inorganic Contaminants (Unit)							
Mercury (ppb)	2	2	1.2 (RAA)	0-1.7	2022	No	Erosion of natural deposits; Discharge from refineries & factories; Runoff from landfills; Runoff from cropland.
Nitrate (ppm)	10	10	2.8	0-2.8	2022	No	Runoff from fertilizer use; leaching from septic systems, sewage; Erosion of natural deposits
Chlorobenzene (ppb)	100	100	0.64	0-0.64	2022	No	Discharge from chemical and agricultural chemical factories.
Lead and Copper	MCLG	MCL	90th percentile	# Sites > Action Level	Sample Date	Violation?	Typical Source of Contaminant
Lead (ppb)	0	15 (AL)	0.37	0	2021	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	1.3	1.3 (AL)	0.13	0	2021	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching of wood preservatives
Disinfectant	MRDLG	MCL	Your Water	Range (Low to High)	Sample Date	Violation?	Typical Source of Contamiant
Chlorine (ppm)	4	4	1 (RAA)	0.52-0.89	2022	No	Water additive used to control microbes
Disinfection By-Products	MCLG	MCL	Your Water	Range (Low to High)	Sample Date	Violation?	Typical Source of Contaminant
Haloacetic Acids (HAA) (ppb)	N/A	60	1 (LRAA)	0-1	2022	No	By-product of water disinfection
Total Trihalomethanes (TTHMs) (ppb)	N/A	80	1.2 (LRAA)	0-1	2022	No	By-product of water disinfection
Radioactive Contaminants	MCLG	MCL	Your Water	Range (Low to High)	Sample Date	Violation?	Typical Source of Contaminant
Beta/photon emitters (mrem/yr)	0	4	4.75*	0-4.75	2022	No	Decay of natural and man-made deposits
Gross Alpha excluding Radon & Uranium (pCi/L)	0	15	10	0-10	2022	No	Erosion of natural deposits
Combined Radium** 226/228 (pCi/L)	0	4.6	4 (RAA)	0.2-5.5	2022	No	Erosion of natural deposits

<sup>\*</sup> The MCL is based on the running annual average (RAA). The RAA for the beta/photon emitters is 1.18, which is below the MCL.

<sup>\*\*</sup> Our 13 active groundwater sources are sampled at varying frequencies. Compliance is based on running annual averages for 4 quarters. We are meeting compliance at all sit

Unregulated Contaminants***	Highest Level Found	Range (Low to High)	Sample Date	Typical Source of Contaminant
Methyl Tert-Butyl Ether [MTBE] (ppb)	10.7	0-10.7	2022	Fuel additive found at or near leaking underground or above ground storage tanks
Sodium (ppm)	35	8.8-35	2021	Naturally occurring

\*\*\*Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether the Agency should consider regulating those contaminants in the future.

For information on the water we purchase from Alligator Water, visit www.alligatorwater.myruralwater.com/water-quality-report.

### mportant Drinking Water Definitions

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

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

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.

Millirems Per Year (mrem/year) - A measure of radiation absorbed by the body.

Parts per billion (ppb) or micrograms per liter (µg/l) - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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 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. Running Annual Average (RAA) - The system-wide running annual average.



# 2023 Annual Drinking Water Report

Includes water testing for 2022

2638 Old Stagecoach Road Cassatt SC 29032 (803) 432-8235 1-800-521-2441 www.cassattwater.com
South Carolina PWS
No. SC2820005

Cassatt Water is pleased to present the 2023 Annual Drinking Water Quality Report ("Consumer Confidence Report") as required by the Safe Drinking Water Act (SDWA). This report provides Cassatt Water customers with information regarding your drinking water system and summarizes 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.

**Spanish (Española):** Este informe contiene informacion muy importante sobre la calidad de su agua beber. Traduscalo o hable con alguien que lo entienda bien.

## **About Our Water Sources:**

The majority of water distributed by Cassatt Water is groundwater obtained from thirteen (13) wells located in Lee County and Kershaw County, within the Cassatt Water service area. Additionally, some water is purchased from the Alligator Rural Water & Sewer Company, Inc. 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.

# Information about Contaminants in Drinking Water:

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 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 (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. Inorganic contaminants, such as salts and metals, 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 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, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive contaminants can be naturally occurring or be the result of oil and gas production and mining activities. 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 that must provide the same protection for public health.

# For Customers with Special Health Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people 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 and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

# **Source Water Assessment**

SCDHEC performed a Source Water Assessment Plan for Cassatt Water in 2003. This plan identifies potential sources of contamination to drinking water supplies. 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 receive a copy of the document. A copy of the document is available for review at Cassatt Water, 2638 Old Stagecoach Road, Cassatt S.C., 29032.

### **Source Water Protection**

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 can be 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/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.

## What You Should Know about 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 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 (800-426-4791) or at http://www.epa.gov/safewater/lead

# Per- and polyfluoroalkyl substances (PFAS)

Per- and polyfluoroalkyl substances, known more commonly as PFAS, are a group of manufactured chemicals that have been used in industry and consumer products since the 1940s because of their heat, water, and stain resistance. There are thousands of different PFAS, a few of which have been more widely used and studied than the others. PFAS are found in many products in use every day, including:

- Fire extinguishing foam;
- Manufacturing or chemical production facilities that produce or use PFAS for example at chrome plating, electronics, and certain textile and paper manufacturers.
- Food and food packaging Fish from PFAS-contaminated waterways or grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes, and candy wrappers.
- Household products and dust for example in stain and water-repellent used on carpets, upholstery, clothing, and other fabrics;
   cleaning products; non-stick cookware; paints, varnishes, and sealants.
- Personal care products for example in certain shampoo, dental floss, and cosmetics.
- Drinking water from public drinking water systems and private drinking water wells.

Surveys conducted by the CDC show that most people in the United States have been exposed to some PFAS. Most known exposures are relatively low, but some can be high, particularly when people are exposed to a concentrated source over long periods of time. Some PFAS chemicals can accumulate in the body over time. Current scientific research suggests that exposure to high levels of certain PFAS may lead to adverse health outcomes. However, research is still ongoing to determine how different levels of exposure to different PFAS can lead to a variety of health effects. Scientists are continuing to conduct and review the growing body of research about PFAS. Research is also underway to better understand the health effects associated with low levels of exposure to PFAS over long periods of time, especially in children.

In 2021, Cassatt Water conducted water tests for 18 PFAS compounds in its groundwater wells. After multiple rounds of testing, no compounds were found above the detection level of 2.0 parts per trillion (ppt). Beginning in January 2024, Cassatt Water will conduct testing in compliance with the EPA's Fifth Unregulated Contaminant Monitoring Rule (UCMR 5), which established nationwide monitoring for 29 PFAS substances in the nation's drinking water to address potential public health and environmental risks.

# **How You Can Learn More**

If you would like to know more about the information provided in this report, please contact John Watkins at (803) 432-8235, ext. 122. Our website, 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; and employment opportunities. Cassatt Water holds its board meeting on the 3rd Monday of every month at 2pm at our office at 2638 Old Stagecoach Road in Cassatt.

# **Water Quality Data Table**

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may improve the taste of drinking water and have nutritional value at low levels.

Unless otherwise noted, the data presented in the tables on the next page is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.