

ANNUAL WATER QUALITY REPORT

Reporting Year 2021



Presented By
City of Tega Cay



We've Come a Long Way

Once again, we are proud to present our annual water quality report covering the period between January 1 and December 31, 2021. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day—at all hours—to deliver the highest-quality drinking water without interruption.



We are once again pleased to report that the water provided by the City of Tega Cay met all water quality standards in 2021. For more information about this report, or for any questions relating to your drinking water, please contact me at (803) 548-3514.

Sincerely,

Philip E. Jolley

Utilities Director

Where Does My Water Come From?

The City of Tega Cay has an agreement to purchase its drinking water from Fort Mill, which purchases its drinking water from the City of Rock Hill. The supply system between the City of Tega Cay and Fort Mill consists of a 12-inch-diameter transmission main installed in the Sutton Road right-of-way from the Catawba River Bridge to New Grey Rock Road. In 2021 Tega Cay purchased in excess of 361 million gallons from the Town of Fort Mill. This water is distributed through the Tega Cay system to serve residential and commercial customers.

Lake Wylie is the City of Rock Hill's raw water source. Raw water is pumped to the treatment facility, where treatment takes place. Rock Hill monitors its water treatment process on a 24-hour basis. The City of Tega Cay, as required by state law, conducts additional testing throughout its distribution system. The tables contained in this report show the results of monitoring for the period of January 1 to December 31, 2021. The City of Tega Cay is pleased to report that its drinking water is safe and meets all federal and state requirements.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 two 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Safeguard Your Drinking Water

Protection of drinking water is everyone's responsibility. 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 source.
- Pick up after your pets.
- If you have your own septic system, properly maintain it to reduce leaching to water sources, or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed to locate groups in your community.
- Organize a storm drain stenciling project with others in your neighborhood. Stencil a message next to the street drain reminding people "Dump No Waste – Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

- Some grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit <https://www.atsdr.cdc.gov/pfas/index.html>.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water. (A complete list of all the analytical results are available upon request from the City of Rock Hill). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2021	[4]	[4]	1.5	1.5–1.5	No	Water additive used to control microbes
Haloacetic Acids [HAAs] (ppb)	2021	60	NA	21	11.8–24.5	No	By-product of drinking water disinfection
TTHMs [total trihalomethanes] (ppb)	2021	80	NA	43	22.1–55.5	No	By-product of drinking water disinfection
Total Coliform Bacteria (positive samples)	2021	TT	NA	1	NA	No	Naturally present in the environment

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2019	1.3	1.3	0.034	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2019	15	0	ND	1/30	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

WATER PURCHASED FROM ROCK HILL - WATER QUALITY DATA TABLE FOR 2021

MICROBIOLOGICAL CONTAMINANTS

CONTAMINANT	LIMIT (TREATMENT TECHNIQUE)	LEVEL DETECTED	VIOLATION	LIKELY SOURCE OF CONTAMINATION	
Turbidity	1 NTU	Highest Single Measurement	0.08	No	Soil runoff
	0.3 NTU	Lowest Monthly Percentile	100%	No	Soil runoff

Total Organic Carbon: The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

INORGANIC CONTAMINANTS

CONTAMINANTS	YEAR	MCLG	MCL	UNITS	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Nitrate [measured as Nitrogen]	2021	10	10	ppm	0.49	0.49–0.49	No	Runoff from fertilizer use; Leaching from Septic tanks, sewage; Erosion of natural deposits
Fluoride	2021	4	4.0	ppm	0.61	0.61–0.61	No	Erosion of natural deposits; Water additive which promotes stron teeth; Discharge from fertilizer and aluminum factories

Radionuclide Contaminants

Beta Photon Emitters	2021	0	4 mrem/ yr**	pCi/L	4.88 pCi/:	0–4.88	No	Decay of natural and man-made deposits.
Tritium	2021	0	4 mrem/yr*	pCi/L	1560 pCi/L	304–1560	No	Decay of natural and man-made deposits.

**EPA considers 50 pCi/L to be the level of concern for beta/photon emitters

*Average annual concentration assumed to produce a total body or organ dose of 4 mrem/yr for Tritium is 20,000 pCi per liter.

UNREGULATED CONTAMINANTS

ANALYTE NAME	COLLECTION DATE	MCLG	MCL	UNITS	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Sodium	2021	not regulated	not regulated	ppm	4.6	4.6–4.6	No	Erosion of natural deposits; Leaching
Hardness (optional)	2021	not regulated	not regulated	ppm	39.0	19.0–39.0	No	Erosion of natural deposits; Leaching

Definitions

UNIT DESCRIPTIONS

Term	Definition
90th %ile	The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NTU	NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring no required, but recommended

IMPORTANT DRINKING WATER DESCRIPTIONS

Term	Definition
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
AL	Action Level: the concentration which, if exceeded, triggers treatment or other requirements which a water system must follow.
ALG	Action Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. AGLs allow for a margin of safety.
MRL	Minimum Reporting Levels: The value and unit of measure at or above which the concentration of the contaminant must be measured using the approved analytical methods.

Think Before You Flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of our waterways by disposing responsibly. To find a convenient drop-off location near you, please visit <https://bit.ly/3leRyXy>.

Community Participation

You are invited to attend our city council meetings and voice your concerns about your drinking water. Council meetings are usually scheduled for the third Monday of each month beginning at 7:00 p.m. at Council Chambers, located in the lower level of the Glennon Center, 15077 Molokai Drive.