Charleston Water System Water Quality Report 2021

Regulatory Testing

These are the compounds we are required to test for, and all were below the regulatory limit.

	Required Regulatory Report	Maximum Contaminant Level (MCL) set by EPA	Maximum Contaminant Level Goal (MCLG)	Actual Level in CWS Water for 2021	Year Sampled	Possible Sources in Water
	Turbidity A measure of the amount of suspended particles in the water (cloudiness); an indicator of overall water quality and filtration effectiveness.	Requires a specific treatment technique; 95% of monthly samples must be less than 0.3 NTU.	NA	0.10 NTU highest level detected. 100% of monthly samples met the limit. Range: 0.07 – 0.10 NTU.	2021	Soil runoff.
	Cryptosporidium (in source water) A parasite spread through human and animal waste that causes gastrointestinal illness.	No MCL exists.	Zero Crypto- sporidium oocysts per 1 liter of water.	0.1 per liter. Range: 0 to 0.1 per liter.	2021	Human and animal sources.
	Giardia (in source water) A parasite spread through human and animal waste that causes gastrointestinal illness.	No MCL exists.	Zero Giardia oocysts per 1 liter of water.	0.3 per liter. Range: 0 to 0.3 per liter.	2021	Human and animal sources.
Inorganic Compounds	Copper A metal widely used in household plumbing that may corrode into water.	90 th percentile of all samples collected must be less than the 1.3 ppm action level.	1.3 ppm.	90 th percentile = 0.09 ppm. No samples exceeded the action level. Range: 0 to 0.14 ppm.	2021	Corrosion of household plumbing materials.
	Lead A metal no longer used in water pipes, but may be present in plumbing fixtures or old pipes; may corrode into water.	90 th percentile of all samples collected must be less than the 15 ppb action level.	O ppb.	90 th percentile = 2.1 ppb. One sample exceeded the action level. Range: 0 to 19 ppb.	2021	Corrosion of household plumbing materials.
	Nitrate/Nitrite (as N) Nitrates and nitrites are nitrogen-oxygen compounds that can become a source of pollution in the form of unwanted nutrients.	Nitrate 10 ppm. Nitrite 1 ppm.	Nitrate 10 ppm. Nitrite 1 ppm.	0.09 ppm. Range: 0.09 to 0.09 ppm.	2021	Runoff from fertilizers.
	Fluoride A substance that is naturally occurring in some water sources, particularly groundwater. It is also added to drinking water to help prevent tooth decay.	4 ppm.	4 ppm.	0.08 ppm in source water. 0.46 ppm in finished water. Range: 0.43 to 0.52 ppm.	2021	Naturally occurring in source water and adjusted during treatment to prevent tooth decay.
Disinfectants	Chlorine Dioxide A disinfection agent added in small amounts to protect against microbes.	0.8 ppm.	0.8 ppm.	0.26 ppm. Range: 0 to 0.26 ppm.	2021	Added for disinfection.
	Chloramine Residual A compound of chlorine and ammonia added in small amounts to treated water to protect against microbes.	4 ppm MRDL.	4 ppm MRDLG.	3.0 ppm Running Annual Average. Range: 2.0 – 3.0 ppm.	2021	Added for disinfection.

(Data continued on next page.)

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