2023 WATER QUALITY REPORT

SJWD ID#4220006 *QUALITY IS A PRIORITY*

SJWD Water Not Only Meets But Exceeds All Federal & State Water Quality Standards

SJWD's Lake Cooley in Inman, SC

SJWD Water District is pleased to present to you our 2023 Water Quality Report. To ensure our customers safe drinking water, the U.S. Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environmental Control (DHEC) regulates the amount of contaminants found in our public drinking water. These regulations and standards help protect the customer against harmful chemicals and organisms, as well as water borne disease. It is SJWD's primary focus to eliminate the harmful contaminants for the safety of the customer.

Each year, the EPA requires Water Systems to present their water quality information to the public. This report will cover our water quality monitoring from January 1, 2023, to December 31, 2023. As we give you this pertinent water quality information, we also hope to enlighten you on where your water comes from, how your water is treated, as well as SJWD and our mission to provide you with excellent water quality.

If you would like to get more involved, our Commissioners hold monthly meetings at SJWD administration office (307 Spartanburg Highway, Wellford, SC). These meetings are open to the public and an agenda is posted in the lobby of our administration office. Please contact us in advance if you wish to attend the meeting. For more information, please contact us at 864-439-4423.

If you would like more information about your water quality, the SJWD treatment processes, or information in this report, you may contact us by calling the SJWD treatment facility at 864-572-1108.

SJWD MISSION

Our mission is to provide high-quality, affordable water services to SJWD customers while protecting local finite water resources and promoting the overall health and welfare of our community.

WHERE DOES MY WATER COME FROM?

SJWD's water sources are the Middle Tyger River (Lyman Lake) and the North Tyger River (Lake Cooley and North Tyger Reservoir). All water is treated at the SJWD water treatment facilities on Groce Road in Lyman, SC. The source of our water originates in the northern parts of Greenville and Spartanburg counties. There is very little industrial and commercial contamination in this area. Since many of you live in or use this area, we would like to encourage you to do your part to help protect these precious water supplies. We would be pleased to share with your ways to help better protect our watersheds.

Our Source Water Assessment Plan is available for your review at www.scdhec.gov/water/html/srcewtr.html. A copy of the plan is available at our office.

HOW IS MY WATER TREATED?

SJWD Water District owns and operates two water treatment plants. One is a conventional treatment facility with sedimentation and filtration. The other is a membrane filtration plant. Both facilities are located on Groce Road in Lyman. Each facility uses USEPA and SCDHEC approved methodologies for making sure your water meets all drinking water requirements. The water is chemically treated to remove solids and other contaminants and to kill disease-producing organisms. The water is then filtered to further enhance the clarity and to remove small particles and microbials such as Giardia and Cryptosporidium. Additional chemicals are added to stabilize the water and inhibit corrosion in the pipeline distribution systems.

DATA ABBREVIATIONS

SJWD Water District: Startex Jackson Wellford Duncan Water District

USEPA: US Environmental Protection Agency **SCDHEC**: SC Department of Health and Environmental Control

MCL: Maximum Contaminant Level – The highest level of the contaminant that is allowed by the current regulations.

MCLG = Maximum Contaminant Level Goal – The level of a contaminant in drinking water below which there is no known health risk

ppm = parts per million **ppb** = parts per billion **NTU** = Nepholometric Turbidity Units **mg/l** = milligrams per liter

ug/l = Microgram per liter **piC/l** = Picocuries per liter is a measure of the radioactivity in water

Action Level(AL) = The concentration of a contaminant that triggers treatment or other requirements that a water system must follow. Action Levels are reported at the 90th percentile for homes at greatest risk

TT = Treatment Technique – A required process intended to reduce the level of a contaminant in drinking water

N/A = Not applicable or data not available **ND** = Not Detected **HDL** = Highest Detected Level **A** = absent for organism

(P) = present for organism **(Y)** = yes **(N)** = no **RAA** = Running Annual Average **LRAA** = Locational Running Annual Average

Water Quality Data

January 1, 2023 – December 31, 2023

REGULATED PARAMETERS DETECTED IN SJWD FINISHED DRINKING WATER								
Substance (units)	**MCL**	**MCLG**	**SJWD Avg.**	**Range**	**HDL**	**Violation**	**Source**	**Year of analysis**
Turbidity (NTU) see note[1]								
Conventional plant	1.0	N/A	0.050	0.03-0.09	0.09	N	Soil Runoff	2023
Membrane plant	1.0	N/A	0.030	0.01-0.06	0.06	N		
Nitrate (ppm)	10	10	0.245	0.23-0.26	0.26	N	Naturally occurring and fertilizer runoff	2023
Chlorine (ppm) In SJWD Distribution System	4.0	4.0	0.91	0.22-1.54	1.54	N	Water additive to control microbes	2023

[1]Turbidity is a measurement taken to determine the clarity of the water. The EPA standards for turbidity of filtered water may not exceed 0.3 NTU in more than 5% of all the measurements taken and must never exceed 1 NTU. Turbidity measurements are monitored continually on each filter effluent and recorded every fifteen minutes. SJWD met this requirement in 2023. In addition, SJWD is a member of the American Water Works Association's Partnership for Safe Water Program. This program sets a more stringent requirement for its members of 0.10 NTU turbidity 95% of the time. **SJWD met this goal in 2023.**

REGULATED PARAMETERS DETECTED IN SJWD FINISHED DRINKING WATER

Substance (units)	MCL	MCLG	SJWD	Range	HDL	Source	Year of analysis
pH (Std units)	N/A	N/A	7.06	6.71-7.41	7.41	Naturally occurring, added for corrosion inhibition	2023
Phosphate (ppm PO4)	N/A	N/A	0.36	0.26-0.60	0.60	Added for corrosion inhibition	2023
Hardness (mg/l as CaCO3)	N/A	N/A	14.9	12-22	22	Naturally occurring, added for corrosion inhibition	2023
Iron (mg/l Fe)	1.3	N/A	0.01	ND-0.09	0.09	Erosion of natural deposits	2023
Manganese (mg/l)	0.05	N/A	0.006	ND-0.064	0.064	Erosion of natural deposits	2023
Sodium (mg/l)	N/A	N/A	6.35	5.8-6.9	6.9	Erosion from soil deposits	2023
Fluoride	4.0	4.0	0.0	0.0-0.0	0	Added for dental health, erosion of natural deposits, runoff from fertilizer factories	2023

LEAD & COPPER

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. Infants and young children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. It is advisable to flush your cold water tap for up to 2 minutes before using for drinking or cooking. Detailed information concerning lead and copper health effects can be obtained by contacting SJWD. Additional information is available from the Safe Drinking Water Hotline (800-426-4791). **SJWD met this requirement during 2022.**

LEAD AND COPPER FOUND IN SJWD DISTRIBUTION SYSTEM (REQUIRED EVERY 3 YEARS)

Substance (units)	Action Level	90th Percentile	Number of Sites Exceeding Action Level	Violation	Source	Year
Lead (ppb)	15	0	1	N	Erosion of natural deposits	2022
Copper (ppb)	1300	170	0	N	Erosion of natural deposits	2022

MICROBIOLOGICAL SAMPLES

Total Coliform: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.

Fecal Coliform/E. Coli: Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

SJWD analyzed 922 samples from the distribution system and a sample each day from the treatment plant's finished water for total coliform bacteria. Of the 922 samples from the distribution system, 919 (99.6%) were absent of total coliform organisms. Three repeat samples were required. The EPA standard for total coliforms is 95% of all samples collected must be absent of total coliforms. SJWD met this requirement during 2023.

COLIFORM BACTERIA DETECTED IN SJWD DISTRIBUTION SYSTEM

Substance	MCLG	MCL	Highest # (P)	Violation	Source	Year
Total Coliform	0	5% of monthly samples (P)	1	N	Naturally Present in the Environment	2023

ORGANIC CONTAMINANTS

Total Organic Carbon: Total organic carbon (TOC) has no health effects. However, total organic carbon (TOC) provides a medium for the formation of disinfection by-products. These by-products include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these by-products in excess of the MCL may lead to adverse health effects, liver, or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer. The listed values for TTHM's and HAA's are based on the locational running annual average of 8 representative sample sites in the SJWD distribution systems that are sampled quarterly by SCDHEC. The range represents the minimum and maximum of all the individual samples collected during the year. In addition to these values, SJWD collects and analyzes samples from these 8 sites on a monthly basis. Results from all these extra samples were below the MCL.

SJWD met this requirement during 2023.

ORGANIC CONTAMINANTS DETECTED IN SJWD DISTRIBUTION SYSTEM

Substance (units)	MCL	SJWD LRAA	Range	Violation	Source	Year of Analysis
Total Trihalomethanes (ppb)	80	33.0	12.7-54.6	N	Byproducts of Disinfection	2023
Haloacetic Acids (ppb)	60	37.7	13.1-53.7	N	Byproducts of Disinfection	2023
Total Organic Carbon (% removed)	TT	35%	17.0-48%	N	Naturally occurring and runoff	2023

SJWD is required to remove 35% of the source water TOC through the treatment process if the source water or treated water TOC is greater than 2 mg./l. ***SJWD Water District met this requirement during 2023.***

UNREGULATED PARAMETERS

SJWD routinely monitors for certain water quality parameters that are not regulated. The purpose of monitoring these parameters is to help the USEPA decide whether the contaminants should have a standard. As part of the Unregulated Contaminant Monitoring Rule 4 (UCMR4), SCDHEC tested SJWD's System for Cyanotoxins and additional contaminants. SCDHEC began testing in 2020 and completed UCMR4 testing in 2021. Assessment Monitoring detected no Cyanotoxins. The Total Organic Carbon as measured within the source water has been provided in the table below. As our customers, you have a right to know that the data is available for the contaminants. If you are interested in examining the results, please contact Bradley Norman at 864-572-1108 or bnorman@sjwd.com

UNREGULATED CONTAMINANTS MONITORING RULE 4 (UCMR4)

Substance (units)	SJWD AVG.	Range	HDL	Source	Year of analysis
HAA5(ppb)	31.4	14.7-48.14	48.1	By-product of disinfection	2020
HAA6Br(ppb)	4.9	1.8-7.9	7.9	By-product of disinfection	2020
HAA9(ppb)	36.1	16.5-55.7	55.7	By-product of disinfection	2020
Total Organic Carbon(ppm)	1.82	1.82	1.82	Middle Tyger River	2020
Total Organic Carbon(ppm)	2.25	2.25	2.25	North Tyger River	2020

RADIOACTIVE CONTAMINANTS

Radioactive Contaminants can be naturally occurring in the environment. These contaminants can be the result of oil and gas productions as well as mining and drilling operations. SJWD detected zero levels of radioactive contaminants in its water for 2019.

RADIOACTIVE CONTAMINANTS

Substance (units)	MCL	MCLG	SJWD Avg.	Range	HDL	Violation	Source	Year of analysis
Combined Radium (226 & 228)	0	0	0	0	0	N	Erosion of natural deposits	2019

Important Health Information About Drinking Water Quality

1) 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. 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 (800-426-4791)
2) 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 are available from the Safe Drinking Water Hotline (800-426-4791)
3) Contaminants that may be present in source water include:
    a) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
    b) Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
    c) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
    d) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
    e) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
4) To ensure that tap water is safe to drink, USEPA prescribes regulations that limit the number of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Este informe contiene informacion muy importante sobre su agua de beber si no lo comprende, hable con alquien que se lo pueda explicar

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