

2022 WATER QUALITY REPORT FOR SIRWA – LEON DISTRIBUTION SYSTEM

This report contains important information regarding the water quality in our water system. The source of our water is surface water. All of the water is purchased. Purchased water comes from Leon Water Supply. Our water quality testing shows the following results:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)			
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	57.00 (48 - 74)	06/30/2022	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	42.00 (33- 54)	06/30/2022	No	By-products of drinking water disinfection
Lead (ppb)	AL=15 (0)	90th	ND	2021	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.1 (0.01 - 0.11)	2021	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.99 (1.85 - 2.26)	12/31/2022	No	Water additive used to control microbes

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

DEFINITIONS

- 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.
- 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.
- ppb -- parts per billion.
- ppm -- parts per million.
- pCi/L – picocuries per liter
- N/A – Not applicable
- ND -- Not detected
- RAA – Running Annual Average
- LRAA – Locational Running Annual Average
- Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- 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.
- 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.
- SGL – Single Sample Result
- TCR – Total Coliform Rule
- NTU – Nephelometric Turbidity Units
- SIRWA – Southern Iowa Rural Water Association

GENERAL INFORMATION

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 posed a health risk. More information about contaminants or potential health effects can be obtained by calling the Environmental Protection Agency’s Safe Drinking Water Hotline (800-426-4791).

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* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. SIRWA 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 or at <http://www.epa.gov/safewater/lead>.

SOURCE WATER ASSESSMENT INFORMATION

This water supply obtains some or all of its water from another public water supply. It is a consecutive water supply, where an originating parent supply provides drinking water to one or more downstream supplies.

Original Supply ID	Original Supply Name
IA2742076	Leon Water Supply

CONTACT INFORMATION

For questions regarding this information or how you can get involved in decisions regarding the water system, please contact Chad Mahan, SIRWA's Operations Manager at 641-782-5744 or at cmahan@sirwa.org.

PURCHASED WATER INFORMATION

Our water system purchases water from the City of Leon. Their water quality is as follows:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation Yes/No	Source
		Type	Value & (Range)			
Copper (ppm)	AL=1.3 (1.3)	90 th	0.10 (ND - 0.10)	2021	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15 (0)	90 th	11.00 (ND - 54) 1 sample(s) exceeded AL	2021	No	Corrosion of household plumbing systems; erosion of natural deposits
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.57 (0.76 – 2.05)	12/31/2022	No	Water additive used to control microbes
Total Trihalomethanes (ppb) [TTHM] – DB01	80 (N/A)	LRAA	82.25 (55 - 130)	8/3/2022	Yes	By-products of drinking water chlorination
Total Trihalomethanes (ppb) [TTHM] – DB02	80 (N/A)	LRAA	74.2 (39 - 96)	8/3/2022	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5] – DB01	60 (N/A)	LRAA	62.1 (38 - 47)	2/3/2022	Yes	By-products of drinking water disinfection
Total Haloacetic Acids (ppb) [HAA5] – DB02	60 (N/A)	LRAA	57.9 (24- 68)	8/3/2022	No	By-products of drinking water disinfection
Asbestos (MFL)	7	SGL	0.80	4/30/2019	No	Decay of asbestos cement in water mains; erosion of natural deposits
01 - FRM LITTLE RIVER AFTR TRMNT						
Arsenic (ppb)	10 (0)	SGL	2.0	7/6/2021	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronic production waste.
Fluoride (ppm)	4 (4)	SGL	0.96 (0.70 - 0.96)	9/6/2022	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories

Sodium (ppm)	N/A (N/A)	SGL	21	7/11/2022	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	0.51	1/4/2022	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Atrazine (ppb)	3 (3)	SGL	1.0	7/11/2022	No	Runoff from herbicide used on row crops
Dalapon (ppb)	200 (200)	SGL	2.5	6/21/2022	No	Runoff from herbicide used on rights of way
Turbidity (NTU)	N/A (N/A)	TT	3.07 97.6% of samples met the requirements	8/21/2022	No	Soil runoff
Total Organic Carbon (TOC) (ratio)	N/A	TT	1.40 (1.13 - 1.59)	12/2022	No	Naturally present in the environment

SOURCE WATER ASSESSMENT INFORMATION

This water supply obtains water from one or more surface waters. Surface water sources are susceptible to sources of contamination within the drainage basin.

Surface Water Name	Susceptibility
Little River Reservoir	High

OTHER INFORMATION

Turbidity is an indicator of treatment filter performance and is regulated as a treatment technique.

VIOLATIONS

Violation Type	Contaminate	Begin Date	End Date
Our water system violated a drinking water standard for Total Trihalomethanes (TTHM). Some people who drink water containing trihalomethanes in excess of the MCL over many years may have experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.			
MCL (Chem-Rad), Average	Total Haloacetic Acids (HAA5)	07/01/2022	09/30/2022

In February 2022 we failed to monitor for Haloacetic Acids (HAA5). Adverse health effects, if any, are not known. Monitoring procedures have been corrected to avoid future violations.

In February 2022 we failed to monitor for Total THM. Adverse health effects, if any, are not known. Monitoring procedures have been corrected to avoid future violations.

In August 2022 we had a Single Combined Filter Effluent (SWTR) violation for Turbidity.

In September 2022 we had a Single Combined Filter Effluent (SWTR) violation for Turbidity.