

Annual Drinking Water Quality Report

City of Riverside Water Department

January - December 2022

Is my water safe?

We are pleased to present the 2022 Annual Drinking Water Quality Report. We are committed to ensuring the high quality of your drinking water. Our constant goal is to provide you with a safe and dependable supply of drinking water; during 2022 we received no ADEM Monitoring Violations. We strive to continuously improve the water treatment process and to protect our water resources. **The water delivered to your tap continues to meet all U.S. Environmental Protection Agency (EPA) and Alabama Department of Environmental Management (ADEM) drinking water standards.**

Your water is pumped from two groundwater wells located in the Coosa River Basin Aquifer.

This report is designed to inform you about the quality water that we deliver to you every day. We value our customers' input and desire every customer to be informed about the quality of their drinking water. Our City Council meets the first and third Monday of each month at 5:00 PM at Riverside City Hall, 379 Depot Street.

The City of Riverside Water Department has completed a Source Water Assessment Plan for our water sources, this plan will aid in protecting our water sources. The Source Water Assessment Plan may be reviewed at the Water Department office during normal business hours, or a copy may be obtained for a nominal reproduction fee. We have also established a cross-connection policy to help ensure our ability to provide safe drinking water to all our customers. Please help us make these efforts worthwhile by protecting our source water. Carefully follow instructions on pesticides and herbicides, properly dispose of household chemicals, paints and waste oil and report any system leaks as soon as possible. If you have any questions or concerns, please contact the **Superintendent, Brien Gullede at 205-338-7692**, during regular business hours.

THE MAYOR AND COUNCIL ARE: MAYOR, RUSTY JESSUP | COUNCIL MEMBER, JIMMY HOLLANDER | COUNCIL MEMBER, SAM MADDOX | COUNCIL MEMBER BILL CANTLEY | COUNCIL MEMBER, DAN CAIN | COUNCIL MEMBER, TODD PIERCE | UTILITY SUPERINTENDENT, BRIEN GULLEDGE

Important Drinking Water Definitions:

Action Level (AL) - The concentration of a contaminant that triggers treatment or other requirements that a water system shall follow.

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.

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/yr) - Measure of radiation absorbed by the body.

Nephelometric Turbidity Unit (NTU) - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Non-Detects (ND) - Laboratory analysis indicates that the constituent is not present.

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 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 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.

Parts per quadrillion (ppq) or Picograms per liter (pg/L) - One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picuries per liter (pCi/L) - Picuries per liter is a measure of the radioactivity in water.

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

Threshold Odor Number (T.O.N.) - The greatest dilution of a sample with odor-free water that still yields a just-detectable odor.

Variations & Exemptions - ADEM or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Explanation of reasons for variance/exemptions

Based on a study conducted by ADEM with the approval of the EPA a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus monitoring for these contaminants was not required. City of Riverside Water Department routinely monitors for contaminants in your drinking water according to Federal and State laws. Unless otherwise noted, the data presented in the following tables show the results of our monitoring period of January 1st to December 31st, 2022.

Table of Primary Contaminants

At high levels some primary contaminants are known to pose a health risks to humans. This table provides a quick glance of any primary contaminant detections.

CONTAMINANT	MCL	AMOUNT DETECTED	CONTAMINANT	MCL	AMOUNT DETECTED	CONTAMINANT	MCL	AMOUNT DETECTED
Bacteriological			Selenium(ppb)	50	ND	Epichlorohydrin	TT	ND
Total Coliform Bacteria	< 5%	ND	Thallium(ppb)	2	ND	Ethylbenzene(ppb)	700	ND
Turbidity	TT	0.67	Organic Chemicals			Ethylene dibromide(ppt)	50	ND
Fecal Coliform & E. coli	0	ND	Acrylamide	TT	ND	Glyphosate(ppb)	700	ND
Radiological			Alachlor(ppb)	2	ND	Haloacetic Acids(ppb)	60	ND
Beta/photon emitters (mrem/yr)	4	ND	Atrazine(ppb)	3	ND	Heptachlor (ppt)	400	ND
Alpha emitters (pci/l)	15	ND	Benzene(ppb)	5	ND	Heptachlor epoxide(ppt)	200	ND
Combined radium (pci/l)	5	ND	Benzo(a)pyrene[PHAs](ppt)	200	ND	Hexachlorobenzene(ppb)	1	ND
Uranium(pci/l)	30	ND	Carbofuran(ppb)	40	ND	Hexachlorocyclopentadiene(ppb)	50	ND
Inorganic			Carbon Tetrachloride(ppb)	5	ND	Lindane(ppt)	200	ND
Antimony (ppb)	6	ND	Chlordane(ppb)	2	ND	Methoxychlor(ppb)	40	ND
Arsenic (ppb)	10	ND	Chlorobenzene(ppb)	100	ND	Oxamyl [Vydate](ppb)	200	ND
Asbestos (MFL)	7	ND	2,4-D	70	ND	Pentachlorophenol(ppb)	1	ND
Barium (ppm)	2	0.02	Dalapon(ppb)	200	ND	Picloram(ppb)	500	ND
Beryllium (ppb)	4	ND	Dibromochloropropane(ppt)	200	ND	PCBs(ppt)	500	ND
Bromate(ppb)	10	ND	0-Dichlorobenzene(ppb)	600	ND	Simazine(ppb)	4	ND
Cadmium (ppb)	5	ND	p-Dichlorobenzene(ppb)	75	ND	Styrene(ppb)	100	ND
Chloramines(ppm)	4	ND	1,2-Dichloroethane(ppb)	5	ND	Tetrachloroethylene(ppb)	5	ND
Chlorine(ppm)	4	1.08	1,1-Dichloroethylene(ppb)	7	ND	Toluene(ppm)	1	ND
Chlorine dioxide(ppb)	800	ND	Cis-1,2-Dichloroethylene(ppb)	70	ND	TOC	TT	0.3
Chlorite(ppm)	1	ND	trans-1,2-Dichloroethylene(ppb)	100	ND	TTHM(ppb)	80	ND
Chromium (ppb)	100	ND	Dichloromethane(ppb)	5	ND	Toxaphene(ppb)	3	ND
Copper (ppm)	AL=1.3	ND	1,2-Dichloropropane(ppb)	5	ND	2,4,5-TP (Silvex)(ppb)	50	ND
Cyanide (ppb)	200	ND	Di-(2-ethylhexyl)adipate(ppb)	400	ND	1,2,4-Trichlorobenzene(ppb)	70	ND
Fluoride (ppm)	4	ND	Di-(2-ethylhexyl)phthalates(ppb)	6	ND	1,1,1-Trichloroethane(ppb)	200	ND
Lead (ppb)	AL=15	ND	Dinoseb(ppb)	7	ND	1,1,2-Trichloroethane(ppb)	5	ND
Mercury (ppb)	2	ND	Dioxin[2,3,7,8-TCDD](ppq)	30	ND	Trichloroethylene(ppb)	5	ND
Nitrate (ppm)	10	0.17	Diquat(ppb)	20	ND	Vinyl Chloride(ppb)	2	ND
Nitrite (ppm)	1	ND	Endothall(ppb)	100	ND	Xylenes(ppm)	10	ND
Total Nitrate & Nitrite	10	0.17	Endrin(ppb)	2	ND			

Table of Secondary and Unregulated Contaminants

Secondary Drinking Water Standards are guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. ADEM has Secondary Drinking Water Standards established in state regulations applicable to water systems required to monitor for the various components. **Unregulated contaminants** are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

CONTAMINANT	MCL	DETECT	CONTAMINANT	MCL	DETECT	CONTAMINANT	MCL	DETECT
Secondary								
Aluminum	0.02	ND	Foaming Agents	0.5	ND	Silver	7	ND
Chloride	250	2.76	Iron	0.3	ND	Sulfate	70	1.52
Color (PCU)	15	ND	Magnesium	75	15.2	Total Dissolved Solids	500	148
Copper	1	0.003	Odor (T.O.N.)	5	ND	Zinc	5	ND
Special								
Calcium	N/A	25.2	pH (SU)	N/A	7.76	Temperature (*C)	N/A	ND
Carbon Dioxide	N/A	ND	Sodium	N/A	ND	Total Alkalinity	N/A	105
Manganese	0.05	ND	Specific Conductance (umhos)	<500	620.5	Total Hardness (as CaCO3)	N/A	125
Unregulated								
1,1 - Dichloropropene	N/A	ND	Bromobenzene	N/A	ND	Hexachlorobutadiene	N/A	ND
1,1,2,2-Tetrachloroethane	N/A	ND	Bromochloromethane	N/A	ND	Isopropylbenzene	N/A	ND
1,1-Dichloroethane	N/A	ND	Bromodichloromethane	N/A	ND	M-Dichlorobenzene	N/A	ND
1,2,3 - Trichlorobenzene	N/A	ND	Bromoform	N/A	ND	Methomyl	N/A	ND
1,2,3 - Trichloropropane	N/A	ND	Bromomethane	N/A	ND	Metolachlor	N/A	ND
1,2,4 - Trimethylbenzene	N/A	ND	Butachlor	N/A	ND	Metribuzin	N/A	ND
1,2,4-Trichlorobenzene	N/A	ND	Carbaryl	N/A	ND	MTBE	N/A	ND
1,3 - Dichloropropane	N/A	ND	Chloroethane	N/A	ND	N - Butylbenzene	N/A	ND
1,3 - Dichloropropene	N/A	ND	Chlorodibromomethane	N/A	ND	Naphthalene	N/A	ND
1,3,5 - Trimethylbenzene	N/A	ND	Chloroform	N/A	ND	N-Propylbenzene	N/A	ND
2,2 - Dichloropropane	N/A	ND	Chloromethane	N/A	ND	O-Chlorotoluene	N/A	ND
3-Hydroxycarbofuran	N/A	ND	Dibromochloromethane	N/A	ND	P-Chlorotoluene	N/A	ND
Aldicarb	N/A	ND	Dibromomethane	N/A	ND	P-Isopropyltoluene	N/A	ND
Aldicarb Sulfone	N/A	ND	Dichlorodifluoromethane	N/A	ND	Propachlor	N/A	ND
Aldicarb Sulfoxide	N/A	ND	Diieldrin	N/A	ND	Sec - Butylbenzene	N/A	ND
Aldrin	N/A	ND	Fluorotrichloromethan	N/A	ND	Tert - Butylbenzene	N/A	ND

Table of Detected Drinking Water Contaminants

CONTAMINANT	MCLG	MCL	Range			Amount Detected		Likely Source of Contamination
Bacteriological Contaminants January - December 2022								
Total Coliform Bacteria	0	< 5%				ND	Present or Absent	Naturally present in the environment
Turbidity	0	TT				0.67	NTU	Soil runoff
Barium	2	2	0.02	-	0.02	0.02	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine	MRDLG 4	MRDL 4	0.94	-	1.24	1.08	ppm	Water additive used to control microbes
Copper	1.3	20 Sites AL=1.3	No. of Sites above action level 0			ND	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	0	20 Sites AL=15	No. of Sites above action level 0			ND	ppb	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as N)	10	10	0.12	-	0.21	0.17	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Nitrate & Nitrite	10	10	0.12	-	0.21	0.17	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Organic Contaminants January - December 2022								
Haloacetic Acids (HAA5)	0	60	ND	-	ND	ND	ppb	By-product of drinking water chlorination
Total Organic Carbon (TOC)	N/A	TT	0.3	-	0.3	0.3	TT	Naturally present in the environment
Total trihalomethanes (TTHM)	0	80	ND	-	ND	ND	ppb	By-product of drinking water chlorination
Secondary Contaminants January - December 2022								
Aluminum	N/A	0.2	0.002	-	0.002	0.002	ppm	Erosion of natural deposits or as a result of treatment with water additives
Chloride	N/A	250	2.76	-	2.76	2.76	ppm	Naturally occurring in the environment or as a result of agricultural runoff
Color	N/A	15	ND	-	ND	ND	PCU	Naturally occurring in the environment or as a result of treatment with water additives
Copper	N/A	1	0.003	-	0.003	0.003	ppm	Erosion of natural deposits; leaching from pipes
Foaming Agents	N/A	0.5	ND	-	ND	ND	ppm	Naturally occurring in the environment
Iron	N/A	0.3	ND	-	ND	ND	ppm	Erosion of natural deposits
Magnesium	N/A	0.05	15.2	-	15.2	15.2	ppm	Erosion of natural deposits
Odor	N/A	3	ND	-	ND	ND	T.O.N.	Naturally occurring in the environment or as a result of treatment with water additives
Silver	N/A	0.1	ND	-	ND	ND	ppm	Erosion of natural deposits
Sulfate	N/A	250	1.52	-	1.52	1.52	ppm	Naturally occurring in the environment
Total Dissolved Solids	N/A	500	148	-	148	148	ppm	Erosion of natural deposits
Zinc	N/A	5	ND	-	ND	ND	ppm	Erosion of natural deposits
Special Contaminants January - December 2022								
Calcium	N/A	N/A	25.2	-	25.2	25.2	ppm	Erosion of natural deposits
Carbon Dioxide	N/A	N/A	ND	-	ND	ND	ppm	Erosion of natural deposits
Manganese	N/A	N/A	ND	-	ND	ND	ppm	Erosion of natural deposits
pH	N/A	N/A	7.76	-	7.76	7.76	SU	Naturally occurring in the environment or as a result of treatment with water additives
Sodium	N/A	N/A	ND	-	ND	ND	ppm	Naturally occurring in the environment
Specific Conductance	N/A	<500	620.50	-	620.50	620.50	umhos	Naturally occurring in the environment or as a result of treatment with water additives
Temperature	N/A	N/A	ND	-	ND	ND	°C	Naturally occurring in the environment
Total Alkalinity	N/A	N/A	105.0	-	105.0	105.0	ppm	Erosion of natural deposits
Total Hardness (as CaCO3)	N/A	N/A	125.0	-	125.0	125.0	ppm	Naturally occurring in the environment or as a result of treatment with water additives

Reporting Non-Compliance

The City of Riverside Water System has incurred a synthetic organic chemical (SOC) reporting non-compliance. The non-compliance resulted from a failure to submit the January 2020-December 2022 results by January 10, 2023.

ADEM Admin. Coder. 335-7-2-.20(1)(a) states, "the supplier of water shall report to the Department the results of any test, measurement or analysis within the first 10 days following the month in which the result is received or the first 10 days following the end of the required monitoring period as stipulated by the Department, whichever is shortest."

General Information

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk. The EPA or ADEM requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

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 radioactive material, and it can pick up substances resulting from the presence of animals or from human activities.

As you can see by the tables, our system had no monitoring violations of allowable limits of contaminants in drinking water. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at these levels. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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.

Total Coliform: The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

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. The City of Riverside Water Works 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>."

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immuno-compromised such as cancer patients undergoing chemotherapy, organ transplant recipients, HIV/AIDS positive or other immune system disorders, some elderly, and infants can be particularly at risk from infections. People at risk should seek advice about drinking water from their health care providers. EPA (Environmental Protection Agency)/CDC (Center of Disease Control) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline. All Drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. 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).

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

We at the City of Riverside Water Department work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Carefully follow instructions on pesticides and herbicides you use for your lawn and garden, and properly dispose of household chemicals, paints and waste oil. Report any leaks or tampering with water lines or hydrants to our office.

For more information, please contact:

Brien Gullede, Utility Superintendent

City of Riverside Water Department

379 Depot Street

Riverside, AL 35135

Telephone: 205-338-7692

Hours: Monday – Thursday, 8:00 AM CST–5:00 PM CST

Friday, 8:00-12:00 CST