

General Information

All 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 poses a health risk. Maximum Contaminant Levels (MCLs - defined in the List of Definitions in this report) are set at very stringent levels. To understand the possible health effects described for many regulated constituents, 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. 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 activity. Contaminants 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, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water run-off, 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, storm water run-off, and residential uses.
- 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 storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the levels of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water.

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. Your water system 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 www.epa.gov/safewater/lead. 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 can be particularly at risk from infections. People at risk should seek advice about drinking water from their health care providers.

Be Water-Wise

Due to recent increased precipitation and your cooperative efforts, we have been able to successfully avoid a critical water supply shortage; however, our long-term precipitation deficit continues and calls for ongoing vigilance in the protection of our water resources. We encourage you to continue to use water wisely and conscientiously in the common interest of all our citizens.

Verify that your home is leak free. Read your water meter before and after a two-hour period when no water is being used. If the meter does not read exactly the same, there is a leak.

- Repair dripping faucets by replacing washers. A drip at the rate of one drop per second could waste 2,700 gallons per year.
- Check for toilet leaks by adding food coloring to the tank. If there is a leak, color will appear in the bowl within 30 minutes. Replace worn out, corroded, or bent parts.
- Replace the toilet handle if it frequently sticks in the flush position.
- Operate dishwashers and clothes washers only when they are fully loaded and set the water level appropriate to the size of the load.
- Store drinking water in the refrigerator instead of running the water until it is cool.
- Don't allow water to run needlessly while you are shaving or brushing your teeth.
- Adjust sprinklers so that you are not watering sidewalks and driveways

as well as your lawn.

- Only water your lawn during the cool part of the day to minimize evaporation.

Citizens Water Service - Reporting Non-compliance 2023

Citizens Water Service incurred a synthetic organic compounds (SOC) reporting non-compliance during 2023 resulting from a failure to submit the January 2020 – December 2022 results by January 10, 2023.

We did monitor for SOC's during the correct time frame, and results were in compliance; however, the lab failed to report the results before the 10th day of the month following the sample period. If you have any questions about this non-compliance or your water quality, please contact please contact Heath Plowman, Manager, at 205-556-2224.

Tuscaloosa Water - Turbidity Non-compliance 2023

During the August 2023 monitoring period, the water system exceeded the turbidity MCL of 1.0 resulting in a treatment technique violation and failed to make notification within 24 hours resulting in an acute violation requiring a 24-hour public notice. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches. Subsequent monitoring and additional follow-up testing have not indicated any water contamination. Disinfection standards at the Ed Love Water Treatment Plant were never interrupted. We will continue to monitor water quality to ensure all regulations are being met. If you have questions, please call the Ed Love Water Treatment Facility at 205-248-5630. Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

DEFINITIONS

Action Level- the concentration of a contaminant that, if exceeded, triggers treatment or other requirements which a water system must follow.

Disinfection byproducts (DBPs)- are formed when disinfectants used in water treatment react with bromide and/or natural organic matter (i.e., decaying vegetation). DBPs for which regulations have been established include trihalomethanes (THM), haloacetic acids (HAA5), bromate, and chlorite.

Locational Running Annual Average (LRAA)-annual average of all the DPB results at each specific sampling site in the distribution system.

Maximum Contaminant Level-(MCL) The MCL is 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) MCLG is 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

Millirems per year (mrem/yr)-measure of radiation absorbed by the body.

Nephelometric Turbidity Unit (NTU)-a measure of the clarity of water.

Turbidity in excess of 5 NTU is just noticeable to the average person.

Non-Detect (ND)- laboratory analysis indicates that the constituent is not present above detection limits of lab equipment.

Not Reported (NR)-laboratory analysis (usually secondary contaminants) not reported by water system. EPA recommends but does not require.

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 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 quadrillion (ppq) or Picograms per liter (picograms/l)-one part per quadrillion corresponds to one minute in 2,000,000,000 years, or a single penny in \$10,000,000,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l)-one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

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

Standard Units (S.U.)-pH of water measures the water's balances of acids and bases and is affected by temperature and carbon dioxide gas. Water with less than 6.5 could be acidic, soft, and corrosive. pH greater than 8.5 could indicate that the water is hard.

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

Variance & Exemptions (V&E)-State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

2024 Annual Water Quality Report (Testing Performed January through December 2023)

CITIZENS' WATER SERVICE, INC. (Keenes Mill)

P. O. Box 670
Vance, AL 35490
16773 Highway 11 North
Phone 205-556-2224
Fax 205-556-2264

Office hours: Monday – Thursday, 7:30 a.m. – 5:00 p.m.

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and Alabama Department of Environmental Management (ADEM) drinking water health standards. We diligently safeguard your water supplies, and once again we are proud to report that our system has not violated any water quality standard. We are pleased to present to you this year's Annual Water Quality Report.

Water Sources	Two groundwater wells producing from the Fort Payne Chert and the Knox Formation (Purchased water from City of Tuscaloosa serves the Keenes Mill area)
Water Treatment	Chlorination for disinfection and zinc orthophosphate for corrosion control
Storage Capacity	Seven storage tanks with a total capacity of 2.1 million gallons
# of Customers	Approximately 4000
Board of Directors	Kenny Herring - President Steve McPherson – Vice President Jana Genery – Member Billy Hubbard – Member Mark Stanley - Member
General Manager	Heath Plowman

Source Water Assessment

In compliance with the Alabama Department of Environmental Management (ADEM), Citizens' Water Service, Inc. has developed a Source Water Assessment plan that will assist in protecting our water sources. The assessment has been performed, public notification has been completed, and the plan has been approved by ADEM. A copy of the report is available in our office for review during regular business hours, or you may purchase a copy upon request for a nominal reproduction fee.

Citizens' Water Service, Inc. routinely completes a water storage facility inspection plan and utilizes a Bacteriological Monitoring Plan. The required chlorine residual is maintained throughout our distribution system to protect your drinking water from possible outside contaminants. We have also established a Cross-Connection Policy to insure safe drinking water for our customers. Please help us make these efforts worthwhile by protecting our source water. Carefully follow instructions on pesticides and herbicides you use for your lawn and garden, and properly dispose of household chemicals, paints, and waste oil. We ask that all our customers help us protect our valuable water sources, which are the heart of our community, our way of life, and our children's futures.

Questions

If you have any questions about this report or concerning your water utility, please contact Heath Plowman, Manager, at 205-556-2224. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first Thursday of each month at 6:00 p.m. at the water office. More information about contaminants to drinking water and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (1-800-426-4791).

CITIZENS' WATER SERVICE, INC.

(Keenes Mill)
P. O. Box 670

Vance, AL 35490

Monitoring Schedule and Results

Citizens' Water Service, Inc. and the City of Tuscaloosa routinely monitor for contaminants in your drinking water according to Federal and State laws. ADEM allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. This report contains results from the most recent monitoring in accordance with the regulatory schedule.

Constituent Monitored	Citizens	Tuscaloosa
Inorganic Contaminants	2022	2023
Lead/Copper	2022	2023
Microbiological Contaminants	monthly	monthly
Nitrates	2023	2023
Radioactive Contaminants	2020	2021
Synthetic Organic Contaminants	2023	2021

Constituent Monitored	Citizens	Tuscaloosa
Volatile Organic Contaminants	2023	2022
Disinfection By-products	2023	2018
UCMR4 Contaminants	2020	2018
PFAS Contaminants	2020	2021
Cryptosporidium	Not Required	2019

Contaminants	Violation Y/N	Detectd Citizens	Unit Msmt	MCLG	MCL	Likely Source of Contamination
Chlorine (as Cl ₂)	NO	0.2-3.2	ppm	4	4	Water additive used to control microbes
Chlorine dioxide (as ClO ₂)	NO	0.04-0.64	ppm	0.08	0.08	Water additive used to control microbes
Chlorite (as ClO ₂)	NO	0.026-0.89	ppm	1	1	Water additive used to control microbes
Turbidity	NO	1.251	NTU	none	TT	Soil runoff
Total Organic Carbon	NO	0.9-1.6	ppm	TT	N/A	Soil runoff
Barium	NO	0.019	ppm	2	2	Discharge from drilling & metal refineries; erosion of natural deposits; leaching from preservatives
Copper	NO	0.100 *	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from preservatives
Fluoride	NO	ND-0.65	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from factories
Nitrate (as Nitrogen)	NO	0.46-0.54	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHM [Total trihalomethanes]	NO	LRAA 42.8 27.8-36.8	ppb	0	80	By-product of drinking water chlorination
HAA5 [Total haloacetic acids]	NO	LRAA 25.6 22.5-28.0	ppb	0	60	By-product of drinking water chlorination

Unregulated Contaminants

Chloroform NO ND 4.30-8.50 ppb n/a n/a Naturally occurring; industrial discharge; agricultural runoff

Bromodichloromethane NO ND 2.20-2.80 ppb n/a n/a Naturally occurring; industrial discharge; agricultural runoff

Secondary Contaminants

Aluminum NO ND NR ppm n/a 0.2 Naturally occurring; treatment with water additives

Chloride NO ND NR ppm n/a 250 Naturally occurring; runoff

Hardness NO ND NR ppm n/a n/a Naturally occurring; treatment with water additives

pH in lab NO ND NR S.U. n/a n/a Naturally occurring; treatment with water additives

Sodium NO ND NR ppm n/a n/a Naturally occurring in the environment

Sulfate NO ND 3.1 ppm n/a 250 Naturally occurring; industrial discharge; agricultural runoff

Total Dissolved Solids NO ND 165 ppm n/a 500 Naturally occurring; industrial discharge; agricultural runoff

Zinc NO ND NR ppm n/a 5 Erosion; refinery and factory discharge; landfill runoff

* Figure shown is 90th percentile and # of sites above action level (1.3 ppm) = 0

UCMR4: The Fourth Unregulated Contaminant Monitoring Rule (UCMR4) requires some systems to monitor for a list of unregulated contaminants during January 2018 through December 2020. The table below shows the contaminants we were required to monitor and the results of our monitoring.

Contaminants	Unit Msmt	Level Detected	Contaminants	Unit Msmt	Level Detected
Entry Point Samples					
Germanium	ppb	ND	Oxyfluoren	ppb	ND
Manganese	ppb	ND-5.0	Profenofos	ppb	ND
Alpha-hexachlorocyclohexane	ppb	ND	Tebuconazole	ppb	ND
Chlorpyrifos	ppb	ND	Total permethrin	ppb	ND
Dimethipin	ppb	ND	Tribufos	ppb	ND
Ethioprop	ppb	ND	1-butanol	ppb	ND
Cyanotoxins					
Anatoxin-A	ppb	ND	Cylindrospermopsin	ppb	ND
			Total Microcystins	ppb	ND

PFAS: Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals for which the EPA has not established national primary drinking water regulations for PFAS substances. Below is a list of PFAS contaminants for which our water sources were monitored as required and the results of that monitoring. *PFAS was not detected in our drinking water.*

PFAS Contaminants			
Contaminant	Detectd (in ppb)	Contaminant	Detectd (in ppb)
11-chloroicosafiuoro-3-oxaundecane-1-sulfonic acid	ND	Perfluorodecanoic acid	ND
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	ND	Perfluorotetradecanoic acid	ND
4,8-dioxa-3H-perfluorononanoic acid	ND	Perfluorododecanoic acid	ND
Hexafluoropropylene oxide dimer acidA	ND	Perfluoroheptanoic acid	ND
N-ethylperfluorooctanesulfonamidoacetic acid	ND	Perfluorohexanesulfonic acid	ND
N-methylperfluorooctanesulfonamidoacetic acid	ND	Perfluorononanoic acid	ND
Perfluorobutanesulfonic acid	ND	Perfluorooctanesulfonic acid	ND

Below is a table of contaminants for which the Environmental Protection Agency and the Alabama Department of Environmental Management require testing. These contaminants were not detected in your drinking water unless they are also listed in the Detected Drinking Water Contaminants table elsewhere in this report.

Contaminant	Unit of Msmt	MCL	Contaminant	MCL	Unit of Msmt
Bacteriological Contaminants					
Total Coliform Bacteria	present/absent	<5%	trans-1,2-Dichloroethylene	100	ppb
Fecal Coliform and E. coli	present/absent	0	Dichloromethane	5	ppb
Turbidity	NTU	TT	1,2-Dichloropropane	5	ppb
Cryptosporidium	Calc.organisms/l	TT	Di (2-ethylhexyl)adipate	400	ppb
Radiological Contaminants					
Beta/Photon emitters	mrem/yr	4	Di (2-ethylhexyl)phthalate	6	ppb
Alpha emitters	pCi/l	15	Dinoseb	7	ppb
Combined radium	pCi/l	5	Dioxin [2,3,7,8-TCDD]	30	ppq
Uranium	pCi/l	30	Diquat	20	ppb
Inorganic Chemicals					
Antimony	ppb	6	Endothall	100	ppb
Arsenic	ppb	10	Endrin	2	ppb
Asbestos	MFL	7	Epichlorohydrin	TT	TT
Barium	ppm	2	Ethylbenzene	700	ppb
Beryllium	ppb	4	Ethylene dibromide	50	ppt
Cadmium	ppb	5	Glyphosate	700	ppb
Chromium	ppb	100	Heptachlor	400	ppt
Copper	ppm	AL=1.3	Heptachlor epoxide	200	ppt
Cyanide	ppm	200	Hexachlorobenzene	1	ppb
Fluoride	ppm	4	Hexachlorocyclopentadiene	50	ppb
Lead	ppb	AL=15	Lindane	200	ppt
Mercury	ppb	2	Methoxychlor	40	ppb
Nitrate	ppm	10	Oxamyl [Vydate]	200	ppb
Nitrite	ppm	1	Polychlorinated biphenyls	0.5	ppb
Selenium	ppm	.05	Pentachlorophenol	1	ppb
Thallium	ppm	.002	Picloram	500	ppb
Organic Contaminants					
2,4-D	ppb	70	Simazine	4	ppb
Acrylamide	TT	TT	Styrene	100	ppb
Alachlor	ppb	2	Tetrachloroethylene	5	ppb
Benzene	ppb	5	Toluene	1	ppm
Benzo(a)pyrene [PAHs]	ppt	200	Toxaphene	3	ppb
Carbofuran	ppb	40	2,4,5-TP(Silvex)	50	ppb
Carbon tetrachloride	ppb	5	1,2,4-Trichlorobenzene	.07	ppm
Chlordane	ppb	2	1,1,1-Trichloroethane	200	ppb
Chlorobenzene	ppb	100	1,1,2-Trichloroethane	5	ppb
Chloroform	ppb	200	Trichloroethylene	5	ppb
Dalapon	ppb	200	Vinyl Chloride	2	ppb
1,2-Dichlorobenzene (para)	ppb	75	Xylenes	10	ppm
o-Dichlorobenzene	ppb	600	Disinfectants & Disinfection Byproducts		
1,2-Dichloroethane	ppb	5	Chlorine	4	ppm
cis-1,2-Dichloroethylene	ppb	70	Chlorine Dioxide	800	ppm
1,1-Dichloropropene	ppb	Aldicarb	Chloramines	4	ppm
1,1,1,2-Tetrachloroethane	ppb	Aldicarb Sulfone	Bromate	10	ppb
1,1,2,2-Tetrachloroethane	ppb	Aldicarb Sulfoxide	o-Dichlorobenzene	1	ppm
1,1-Dichloroethane	ppb	Aldrin	HAA5 [Total haloacetic acids]	60	ppb
1,2,3-Trichlorobenzene	ppb	Bromobenzene	TTHM [Total trihalomethanes]	80	ppb
1,2,3-Trichloropropane	ppb	Bromochloromethane	LIST OF UNREGULATED CONTAMINANTS		
1,2,4-Trimethylbenzene	ppb	Bromodichloromethane	Chloroform	Metolachlor	
1,3-Dichloropropane	ppb	Bromoforn	Chloromethane	Metribuzin	
1,3-Dichloropropene	ppb	Bromomethane	Dibromochloromethane	N-Butylbenzene	
1,3,5-Trimethylbenzene	ppb	Butachlor	Dibromomethane	Naphthalene	
2,2-Dichloropropane	ppb	Carbaryl	Dicamba	N-Propylbenzene	
3-Hydroxycarbofuran	ppb	Chloroethane	Dichlorodifluoromethane	O-Chlorotoluene	
LIST OF SECONDARY CONTAMINANTS					
Alkalinity, Total (as CA, Co ₃)	Copper	Corrosivity	Dieldrin	P-Chlorotoluene	
Aluminum	Corrosivity	Odor	Hexachlorobutadiene	P-Isopropyltoluene	
Calcium, as Ca	Foaming agents (MBAS)	Odor	Isopropylbenzene	Propachlor	
Chloride	Hardness	Nickel	M-Dichlorobenzene	Sec - Butylbenzene	
Color	Iron	pH	Methomyl	Tert - Butylbenzene	
			MTBE	Trichlorofluoromethane	