Southside Water Works and Sewer Board

2024 Annual Drinking Water Quality Report

Southside Water Works and Sewer Board is very pleased to provide you with this year's Annual Quality Water Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide you with a dependable supply of drinking water. We want you to understand the efforts we make to maintain and continually improve the water you receive and to protect our water supply.

Southside's water is groundwater drawn from two (2) wells and water purchased from the City of Gadsden. Southside's wells draw from the Fort Payne Chert and the Cambrian and Ordovician Rocks undifferentiated. Each water system must complete a Source Water Assessment Program (SWAP). The SWAP is comprised of four distinct activities: delineation of the source water assessment area, contaminant inventory, susceptibility analysis and public awareness. SWWSB has completed each requirement component of the source water assessment, and the Alabama Department of Environmental Management (ADEM) has approved the plan. The findings of the SWAP are available for your review at the office located at 3001 Highway 77. Chlorine is added throughout the system as a disinfectant.

The Water Works and Sewer Board is pleased to report that our drinking water meets federal and state requirements. If you have any questions about this report or concerning your water utility, please contact Superintendent of Maintenance Brandon Sewell at (256)-442-8707 between 8:30 a.m. through 4:30 p.m. or e-mail your questions to jessica@southsidewater.us.

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 board meetings. They are held on the second Monday of each month, at 3:00 p.m., at the Water Works and Sewer Board Office located at 3001 Highway 77. The Southside Water Works and Sewer Board routinely monitors for constituents in your drinking water according to Federal and State laws.

This table shows the results of our monitoring for the period of January 1st to December 31st, 2024. It is important to remember that the presence of these constituents does not necessarily pose a health risk. This table has many abbreviations you might not be familiar with. To help you better understand these abbreviations we have provided the following definitions:

- 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 ug/l – micrograms per liter – 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 a single penny in $10,000,000,000,000.
- Picocuries per liter (pCi/l) – picocuries per liter is a measure of radioactivity in water.
- Millirems per years (mrem/yr) – measure of radiation absorbed by the body.
- Nephelometric Turbidity Units (NTU) – a measure of the clarity of water. Turbidity more than 5 NTU is just noticeable to the average person.

- Maximum Contaminant Level – The "Maximum Allowed" (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 – The "Goal" (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 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.
- MFL – Million Fibers per Liter.
- AL – Action Level – the concentrations of a contaminant, which, if exceeded, triggers, treatment, or other requirements, which a water system must follow.
- TT – Treatment Technique – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- Variances and Exemptions – The Department or EPA permission not to meet and MCL or a treatment technique under certain conditions.

Table of Detected Contaminants

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Turbidity	No	0.5	NTU	N/A	TT	Soil runoff
Radioactive Contaminants						
Alpha emitters (2023)	No	2.67	pCi/l	N/A	15	Erosion of natural deposits
Combined radium (2023)	No	.581	pCi/l	N/A	5	Erosion of natural deposits
Inorganic Contaminants						
Barium	No	0.13	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper	No	0.23	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	No	ND	ppm	4	4	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Lead	No	1.9	ppb	N/A	AL=15	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Nitrate	No	0.84	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Volatile Organic Contaminants						
Total Trihalomethanes (TTHM)	No	17.55	ppb	N/A	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	No	7.32	ppb	N/A	60	By-product of drinking water chlorination
Total Organic Carbon (TOC)	No	.54	ppm	N/A	TT	Naturally present in the environment
Chlorine	No	1.67	ppm	4	4	Water additive used to control microbes

Table of Primary Contaminants

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

Contaminant	MCL	Amount Detected	Contaminant	MCL	Amount Detected
Bacteriological			Endrin	2 ppb	ND
Total Coliform Bacteria	<5%	4.1	Epichlorohydrin	TT	ND
Turbidity	5.0 NTU	0.5	Glyphosate	700 ppb	ND
Fecal coliform and *E. coli*	TT	1.0	Total Organic Carbon (TOC)	TT	.54
Radiological			Heptachlor	400 ppt	ND
Beta/Photon Emitters	4	ND	Heptachlor epoxide	200 ppt	ND
Alpha Emitters (2023)	15	2.67	Hexachlorobenzene	1 ppb	ND
Combined Radium (2023)	5	0.581	Hexachlorocyclopentadiene	50 ppb	ND
Inorganic			Lindane	200 ppt	ND
Antimony	6 ppb	ND	Methoxychlor	40 ppb	ND
Arsenic	10 ppb	ND	Oxamyl (Vydate)	200 ppb	ND
Asbestos (MFL)	7	ND	PCBs	500 ppt	ND
Barium	2 ppm	.13	Pentachlorophenol	1 ppb	ND
Beryllium	4 ppb	ND	Picloram	500 ppb	ND
Cadmium	5 ppb	ND	Simazine	4 ppb	ND
Chromium	100 ppb	ND	Toxaphene	3 ppb	ND
Copper	AL=1.3 ppm	0.23	Benzene	5 ppb	ND
Cyanide	200 ppb	ND	Carbon Tetrachloride	5 ppb	ND
Fluoride	4 ppm	ND	Chlorobenzene	100 ppb	ND
Lead	AL=15 ppb	1.9	Dibromochloropropane	200 ppt	ND
Mercury	2 ppb	ND	o-Dichlorobenzene	600 ppb	ND
Nitrate	10 ppm	0.84	p-Dichlorobenzene	75 ppb	ND
Nitrite	1 ppm	ND	1,2-Dichloroethane	5 ppb	ND
Selenium	50 ppb	ND	1,1-Dichloroethylene	7 ppb	ND
Thallium	2 ppb	ND	cis-1,2-Dichloroethylene	70 ppb	ND
Organic Chemicals			trans-1,2-Dichlorethylene	100 ppb	ND
2,4-D	70 ppb	ND	Dichloromethane	5 ppb	ND
2,4,5-TB (Silvex)	50 ppb	ND	1,2-Dichloropropane	5 ppb	ND
Acrylamide	TT	ND	Ethylbenzene	700 ppb	ND
Alachlor	2 ppb	ND	Ethylene dibromide	50 ppt	ND
Atrazine	3 ppb	ND	Styrene	100 ppb	ND
Benzo(a)pyrene (PAHs)	200 ppt	ND	Tetrachloroethylene	5 ppb	ND
Carbofuran	40 ppb	ND	1,2,4-Trichlorobenzene	70 ppb	ND
Chlordane	2 ppb	ND	1,1,1-Trichloroethane	200 ppb	ND
Dalapon	200 ppb	ND	1,1,2-Trichloroethane	5 ppb	ND
Di-(2-ethylhexyl) adipate	400 ppb	ND	Trichloroethylene	5 ppb	ND
Di-(2-ethylhexyl) phthalates	6 ppb	ND	TTHM	80 ppb	17.55
Dinoseb	7 ppb	ND	Haloacetic Acids (HAA5)	60 ppb	7.32
Diquat	20 ppb	ND	Toluene	1 ppm	ND
Dioxin (2,3,7,8-TCDD)	30 ppq	ND	Vinyl Chloride	2 ppb	ND

Endothall	100 ppb	ND	Xylenes	10 ppm	ND

The water system incurred a lead consumer notice reporting violation for failure to provide proof that the consumer notification of tap results for the January 2024 – June 2024 lead and copper monitoring period were distributed to customers. The system notated sample results on sampled customers' bills but failed to remit documentation confirming this distribution. The system has since remitted the required documentation to ADEM to remedy this violation and returned to compliance on November 18, 2024.

Unregulated contaminants have no MCL set by the EPA or ADEM but are tested for in your drinking water. These contaminants pose many of the same health risk as the regulated contaminants but their presence in most drinking water is not frequent enough to warrant regulation. Unregulated contaminants are tested to provide historical data on components presence in drinking water over time.

Test Results – Unregulated Contaminant Table

Monitoring Results in ppb

CONTAMINANT	Low Result	High Result	CONTAMINANT	Low Result	High Result
1,1 – Dichloropropene	ND	ND	Chloroform	ND	27.00
1,1,1,2-Tetrachloroethane	ND	ND	Chloromethane	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	Dibromochloromethane	ND	1.1
1,1-Dichloroethane	ND	ND	Dibromomethane	ND	ND
1,2,3 – Trichlorobenzene	ND	ND	Dicamba	ND	ND
1,2,3 – Trichloropropane	ND	ND	Dichlorodifluoromethane	ND	ND
1,2,4 – Trimethylbenzene	ND	ND	Dieldrin	ND	ND
1,3 – Dichloropropane	ND	ND	Hexachlorobutadiene	ND	ND
1,3 – Dichloropropene	ND	ND	Isoprpylbenzene	ND	ND
1,3,5 – Trimethylbenzene	ND	ND	M-Dichlorobenzene	ND	ND
2,2 – Dichloropropane	ND	ND	Methomyl	ND	ND
3-Hydroxycarbofuran	ND	ND	MTBE	ND	ND
Aldicarb	ND	ND	Metolachlor	ND	ND
Aldicarb Sulfone	ND	ND	Metribuzin	ND	ND
Aldicarb Sulfoxide	ND	ND	N - Butylbenzene	ND	ND
Aldrin	ND	ND	Naphthalene	ND	ND
Bromobenzene	ND	ND	N-Propylbenzene	ND	ND
Bromochloromethane	ND	ND	O-Chlorotoluene	ND	ND
Bromodichloromethane	ND	9.70	P-Chlorotoluene	ND	ND
Bromoform	ND	ND	P-Isopropyltoluene	ND	ND
Bromomethane	ND	ND	Propachlor	ND	ND
Butachlor	ND	ND	Sec - Butylbenzene	ND	ND
Carbaryl	ND	ND	Tert - Butylbenzene	ND	ND
Chloroethane	ND	ND	Trichlorfluoromethane	ND	ND

The third Unregulated Contaminant Rule (UCMR3) was initiated by EPA in 2012. UCMR3 requires the monitoring of 2 viruses and 28 unregulated chemical contaminants. These contaminants pose many of the same health risk as the regulated contaminants but their presence in most drinking water is not frequent enough to warrant regulation. Unregulated contaminants are tested to provide historical data on components presence in drinking water over time.

Third Unregulated Contaminant Monitoring (UCMR 3)

Monitoring results in ppb

CONTAMINANT	Detected	CONTAMINANT	Detected
1,2,3 -tricholoropropane	ND	Cobalt	ND
1,3-butadiene	ND	Strontium (2020)	61
chloromethane (methyl chloride)	ND	chromium[5] (2020)	0.5
1,1-dichloroethane	ND	chromium-6[6] (2020)	0.53

Bromomethane	ND	Chlorate (2020)	43
chlorodifluoromethane (HCFC-22)	ND	perflourooctanesulfonic acid (PFOS)	24.5
bromochloromethane (Halon 1011)	ND	perfluorooctanoic acid (PFOA)	24.8
1,4-dioxane (2020)	0.25	perfluorononanoic acid (PFNA)	ND
Vanadium (2020)	0.5	perfluorohexanesulfonic acid (PFHxS)	ND
Molybdenum	ND	perflouorobutanesulfonic acid (PFBS)	126.9
17-β-estradiol	ND	perflouroheptanoic acid (PFHpA)	9.6
17-α-ethynylestradiol	ND	Estrone	ND
Estriol	ND	testosterone	ND
Equilin	ND	4-anadrostene-3,17 dione	ND
Noroviruses	ND	enteroviruses	ND
Manganese	8.8	germanium	ND

The fourth Unregulated Contaminant Rule (UCMR4) was initiated by EPA in 2016. UCMR4 requires the monitoring of 10 cyanotoxins and 20 additional unregulated chemical contaminants. These contaminants pose many of the same health risk as the regulated contaminants but their presence in most drinking water is not frequent enough to warrant regulation. Unregulated contaminants are tested to provide historical data on components present in drinking water over time.

Fourth Unregulated Contaminant Monitoring (UCMR4)			
Monitoring results in ppb			
	Detected		Detected
Germanium	ND	Tribufos	ND
Manganese	8.8	1-butanol	ND
Alpha-hexachlorocyclohexane	ND	2-methoxyethanol	ND
Chlorpyrifos	ND	2-propen-l-ol	ND
Dimethipin	ND	Butylated hydroxyanisole	ND
Ethoprop	ND	O-toluidine	ND
Oxyfluorfen	ND	Quinoline	ND
Profenofos	ND	Total Organic Carbon (TOC)	.54
Tebuconazole	ND	Bromide	ND
Total permethrin (cis- & trans-)	ND	Monobromoacetic Acid	ND
Bromochloroacetic Acid (2020)	4.3	Monochloroacetic Acid	ND
Bromodichloroacetic Acid (2020)	5.2	Tribromoacetic Acid	ND
Chlorodibromoacetic Acid (2020)	1.1	Tricholoroacetic Acid	1.2
Dibromoacetic Acid (2023)	1.6		
Dichloroacetic Acid	3.2		

As you can see by the tables, our system had no violations of allowable limits of contaminants in your drinking water. We are proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these does not necessarily indicate that water poses a health risk. More information can be obtained by calling the Environmental Protection Agency's Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of 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.

Southside Water Works and Sewer Board wants you to be aware that there is not a problem with lead in your 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. Southside Water Works and Sewer Board 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 Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

MCL's 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.

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 microbiological contaminants are available from the Drinking Water Hotline (1-800-426-4791). All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some constituents. It is important to remember that the presence of these constituents does not necessarily pose a health risk.

Southside Water also tests for disinfection byproducts in your water, such as *trihalomethanes* and *haloacetic acids.* Disinfection byproducts are contaminants that develop when chlorine breaks down over an extended period. All test results were well within state and federal standards.

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 is not required.

Southside Water Works and Sewer Board strives to provide a dependable supply of water to all consumers. At times, your water service may be interrupted due to circumstances beyond our control and construction activity from continuous growth. When these occurrences take place, you may notice cloudy, dingy, or even muddy looking water due to the disturbance in the lines. We apologize for these instances and try to flush our lines to prevent this from happening. Often consumers will install a low-cost water filter in their line to help remove settlings in these instances.