Mobile County Water, Sewer & Fire Protection Authority

Annual Drinking Water

Quality Report 2025
Issue 27

It is time again for our Annual Drinking Water Report and Authority Newsletter. This report is designed to inform you about the quality of water and services we deliver to you daily. The Authority continues adding and upgrading infrastructure and facilities to stay ahead of growth within our service area. A list of all Mobile County Water, Sewer and Fire Protection Authority (MCWS&FPA) facilities and addresses is located at our office at 5780 Theodore Dawes Road, Theodore, AL. 36582.

The Authority currently has 13,693 customers. Our distribution system has 304 miles of water lines. Theodore, Tillman's Corner, Cypress Shores, Dawes, Fowl River, Mon Luis Island and Coden are only some of the areas served by the Authority. Our Board of Directors are as follows:

George Callahan, Chairman
Michael Burdine, Vice-Chairman
Audie Tillman, Secretary
Dayan Broughton, Treasurer
Alvin Middleton, Member

The tables in this report show the monitoring results beginning January 1, 2024, through December 31, 2024. If you have any questions concerning water quality, please contact our System Operator, Mr. Andy Ladner, or our Executive Director, Ms. Cindy McLendon, at (251)653-7346, Monday through Thursday from 7 am to 5 pm. You may also attend the monthly board meeting held on the third Thursday of each month at 12:00 pm at the water office located at 5780 Theodore Dawes Rd. Please call to be placed on the agenda one week prior to the meeting. This meeting is subject to change.

Sources of Water

Operating under permit by the Alabama Department of Environmental Management, Mobile County Water, Sewer and Fire Protection Authority operates eight groundwater wells. All our wells draw water from the Pliocene-Miocene aquifer. These wells together have a total permitted pumping capacity of 7,168,320 gallons a day. We currently have six storage tanks with a capacity of 3,950,000 gallons. A.D.E.M. regulations require that all public water supply systems disinfect their water supplies. Water from our wells is treated with chlorine for disinfection, Calciquest (for corrosion control) and sodium hydroxide (50% solution) at Well 6 & 8 for PH adjustment.

Source Water Assessment

Mobile County Water, Sewer and Fire Protection Authority, in conjunction with O'Donnell & Associates, Inc., a Professional Hydrogeologic and Environmental Consulting firm, has completed an extensive source water assessment that identifies potential contaminant sites. Anyone wishing to view this report should contact this office at (251)653-7346.

Service Line Inventory

Mobile County Water, Sewer and Fire Protection Authority (MCWS&FPA) has completed a water service line inventory as required by the United States Environmental Protection Agency (EPA) regulations. Based on reviews of historical records, field investigations, and the use of statistical methods approved and recognized by the EPA and the Alabama Department of Environmental Management (ADEM), MCWS&FPA has determined that no lead or galvanized water service lines requiring replacement are located within its distribution system.

MOBILE COUNTY WATER, SEWER & FPA
PWSID AL0001002

2025 Annual Water Quality Report Tables
(Testing Performed January through December 2024)

Mobile County Water & Fire Protection Authority *routinely* monitors for constituents in your drinking water according to Federal and State laws. The ADEM allows monitoring of 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 which was performed in accordance with the regulatory schedule.

Constituent Monitored	Date Monitored
Inorganic Contaminants	2022
Lead/Copper	2022
Microbiological Contaminants	monthly
Nitrates	2024
Radioactive Contaminants	2024
Synthetic Organic Contaminants (including pesticides and herbicides)	Partial 2024
Volatile Organic Contaminants	2024
Disinfection By-products	2024
DSE Disinfection By-products	2018
Unregulated Contaminant Monitoring Rule 4 (UCMR4) contaminants	2019
PFAS Contaminants	2022

DETECTED DRINKING WATER CONTAMINANTS

Contaminants	Violation Y/N	Level Detected	Unit Msmt	MCLG	MCL	Likely Source of Contamination
Alpha emitters	NO	3.08	PCi/l	0	15	Erosion of natural deposits
Combined radium	NO	Avg 1.04	PCi/l	0	5	Erosion of natural deposits
Barium	NO	ND-0.06	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper	NO	0.540 * (0.0028-0.66)	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	NO	ND-0.43	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from factories
Lead	NO	0.0017 * (ND-0.0021)	ppm	0	AL=0.015	Corrosion of household plumbing systems; erosion of natural deposits
TTHM [Total trihalomethanes]	NO	Highest LRAA 66.8 (34.0-76.0)	ppb	0	80	By-product of drinking water chlorination
HAA5 [Total haloacetic acids]	NO	Highest LRAA 20.0 (10.0-21.0)	ppb	0	60	By-product of drinking water chlorination
Unregulated Contaminants						
Chloroform	NO	ND-1.40	ppb	70	n/a	Naturally occurring; industrial discharge; agricultural runoff
Secondary Contaminants						
Aluminum	NO	ND-0.01	ppm	n/a	0.2	Erosion; treatment with water additives
Chloride	NO	6.8-102	ppm	n/a	250	Naturally occurring in environment or from runoff
Hardness	NO	ND-37.2	ppm	n/a	n/a	Naturally occurring in environment or from water treatment
Iron	NO	ND-0.06	ppm	n/a	0.30	Naturally occurring; erosion; leaching from pipes
Manganese	NO	ND-0.03	ppm	n/a	0.05	Erosion of natural deposits; leaching from pipes
pH	NO	6.5-7.8	S.U.	n/a	n/a	Naturally occurring in environment or from water treatment
Sodium	NO	15.3-181	ppm	n/a	n/a	Naturally occurring in the environment
Sulfate	NO	0.60-5.6	ppm	n/a	250	Naturally occurring; erosion
Total Dissolved Solids	NO	50.0-507	ppm	n/a	500	Naturally occurring in the environment or from runoff
Zinc	NO	ND-0.02	ppm	n/a	5	Erosion; refinery and factory discharge; landfill runoff

** Level detected is 90th percentile of latest round of sampling, and number of sample sites exceeding the Action Level (AL) is 0.*

Detected UCMR4 Contaminants					
Entry Point					
Contaminant	**Unit Msmt**	**Level Detected**	**Contaminant**	**Unit Msmt**	**Level Detected**
Germanium	ppb	ND-0.54	Total permethrin (cis- & trans-)	ppb	ND
Manganese	ppb	ND-110	Tribufos	ppb	ND
Alpha-hexachlorocyclohexane	ppb	ND	1-butanol	ppb	ND
Chlorpyrifos	ppb	ND	2-methoxyethanol	ppb	ND
Dimethipin	ppb	ND	2-propen-1-ol	ppb	ND
Ethoprop	ppb	ND	Butylated hydroxyanisole	ppb	ND
Oxyfluorfen	ppb	ND	O-toluidine	ppb	ND
Profenofos	ppb	ND	Quinoline	ppb	ND-0.072
Tebuconazole	ppb	ND			
Distribution System					
HAA9	ppb	ND-48.9	Total organic carbon (TOC)	ppb	ND-1750
HAA6Br	ppb	0.93-28.2	Bromide	ppb	ND-208
HAA5	ppb	0.93-25.4			

Below is a list of PFAS contaminants for which we monitored in 2022 as required and the results of that monitoring. *PFAS contaminants were not detected in our water.* For more information on PFAS contaminants, please consult www.epa.gov/pfas.

PFAS CONTAMINANTS (in ppb)						
Contaminant	**Unit Msmt**	**Level Detected**		**Contaminant**	**Unit Msmt**	**Level Detected**
11Cl-PF3OUdS (11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid)	ppb	ND		Perfluoroheptanoic acid	ppb	ND
9Cl-PF3ONS (9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid)	ppb	ND		Perfluorohexanesulfonic acid	ppb	ND
ADONA (4,8-dioxa-3H-perfluorononanoic acid)	ppb	ND		Perfluorononanoic acid	ppb	ND
HFPO-DA (Hexafluoropropylene oxide dimer acidA)	ppb	ND		Perfluorooctanesulfonic acid	ppb	ND
NEtFOSAA (N-ethylperfluorooctanesulfonamidoacetic acid)	ppb	ND		Perfluorooctanoic acid	ppb	ND
NMeFOSAA (N-methylperfluorooctanesulfonamidoacetic acid0	ppb	ND		Perfluorotetradecanoic acid	ppb	ND
Perfluorobutanesulfonic acid	ppb	ND		Perfluorotridecanoic acid	ppb	ND
Perfluorodecanoic acid	ppb	ND		Perfluoroundecanoic acid	ppb	ND
Perfluorohexanoic acid	ppb	ND		Total PFAS	ppb	ND
Perfluorododecanoic acid	ppb	ND				

Definitions

In the table you will find many terms and abbreviations that may not be familiar to you. To help you better understand these terms we have provided the following definitions.

1. *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.
2. *Parts per billion (ppb) or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
3. 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.
4. *Action Level* - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
5. *Treatment Technique (TT)* - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
6. *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.
7. 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.
8. *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.
9. *ND* = Not Detected

Following is a list of *Primary Drinking Water Contaminants* and a list of *Unregulated Contaminants* for which our water system routinely monitors. These contaminants were *not* detected in your drinking water unless they are listed in the *Table of Detected Drinking Water Contaminants.*

STANDARD LIST OF PRIMARY DRINKING WATER CONTAMINANTS					
Contaminant	**MCL**	**Unit of Msmt**	**Contaminant**	**MCL**	**Unit of Msmt**
Bacteriological Contaminants			cis-1,2-Dichloroethylene	70	ppb
Total Coliform Bacteria	<5%	present/absent	trans-1,2-Dichloroethylene	100	ppb
Fecal Coliform and E. coli	0	present/absent	Dichloromethane	5	ppb
Fecal Indicators	0	present/absent	1,2-Dichloropropane	5	ppb
Turbidity	TT	NTU	Di (2-ethylhexyl)adipate	400	ppb
Cryptosporidium	TT	Calc.organisms/l	Di (2-ethylhexyl)phthalate	6	ppb
Radiological Contaminants			Dinoseb	7	ppb
Beta/photon emitters	4	mrem/yr	Dioxin [2,3,7,8-TCDD]	30	ppq
Alpha emitters	15	pCi/l	Diquat	20	ppb
Combined radium	5	pCi/l	Endothall	100	ppb
Uranium	30	pCi/l	Endrin	2	ppb
Inorganic Chemicals			Epichlorohydrin	TT	TT
Antimony	6	ppb	Ethylbenzene	700	ppb
Arsenic	10	ppb	Ethylene dibromide	50	ppt
Asbestos	7	MFL	Glyphosate	700	ppb
Barium	2	ppm	Heptachlor	400	ppt
Beryllium	4	ppb	Heptachlor epoxide	200	ppt
Cadmium	5	ppb	Hexachlorobenzene	1	ppb
Chromium	100	ppb	Hexachlorocyclopentadiene	50	ppb
Copper	AL=1.3	ppm	Lindane	200	ppt
Cyanide	200	ppb	Methoxychlor	40	ppb
Fluoride	4	ppm	Oxamyl [Vydate]	200	ppb
Lead	AL=15	ppb	Polychlorinated biphenyls	0.5	ppb
Mercury	2	ppb	Pentachlorophenol	1	ppb
Nitrate	10	ppm	Picloram	500	ppb
Nitrite	1	ppm	Simazine	4	ppb
Selenium	.05	ppm	Styrene	100	ppb
Thallium	.002	ppm	Tetrachloroethylene	5	ppb
Organic Contaminants			Toluene	1	ppm
2,4-D	70	ppb	Toxaphene	3	ppb
Acrylamide	TT	TT	2,4,5-TP(Silvex)	50	ppb
Alachlor	2	ppb	1,2,4-Trichlorobenzene	.07	ppm
Atrazine	3	ppb	1,1,1-Trichloroethane	200	ppb
Benzene	5	ppb	1,1,2-Trichloroethane	5	ppb
Benzo(a)pyrene [PAHs]	200	ppt	Trichloroethylene	5	ppb
Carbofuran	40	ppb	Vinyl Chloride	2	ppb
Carbon tetrachloride	5	ppb	Xylenes	10	ppm
Chlordane	2	ppb	**Disinfectants & Disinfection**		
Chlorobenzene	100	ppb	Chlorine	4	ppm
Dalapon	200	ppb	Chlorine Dioxide	800	ppb
Dibromochloropropane	200	ppt	Chloramines	4	ppm
o-Dichlorobenzene	600	ppb	Bromate	10	ppb
p-Dichlorobenzene	75	ppb	Chlorite	1	ppm
1,2-Dichloroethane	5	ppb	HAA5 [Total haloacetic acids]	60	ppb
1,1-Dichloroethylene	7	ppb	TTHM [Total trihalomethanes]	80	ppb

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