## **Mobile County Water, Sewer & Fire Protection Authority**



# Annual Drinking Water



Quality Report 2023 Issue 25

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.

**T**he Authority currently has 13,346 customers. Our distribution system has 300 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:

Audie Tillman, Chairman Jack Boatman, Vice-Chairman Jim White, Treasurer George Callahan, Secretary Michael Burdine, Member

In 1974 the Safe Drinking Water Act (SDWA) was signed into law requiring all water systems that serve the public to meet national standards for water quality. These standards established limits for certain contaminants and required all public water systems to monitor for these contaminants. Mobile County Water, Sewer and Fire Protection Authority routinely tests for these contaminants in your drinking water according to federal and state laws.

**T**he tables in this report show the monitoring results beginning January 1, 2022 thru December 31, 2022. If you have any questions concerning water quality, please contact our System Operator, Mr. Andy Ladner or our General Manager, Mr. Joe Summersgill at (251)653-7346, Monday thru 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 1 week prior to the meeting. This meeting is subject to change.

#### Sources of Water

**O**perating under permit by the Alabama Department of Environmental Management, Mobile County Water, Sewer and Fire Protection Authority operates 8 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 6 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, Aqua Mag (for corrosion control) and sodium hydroxide (50% solution) at Well 6 & 8 for PH adjustment.

#### Source Water Assessment

**M**obile 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.

#### MCWS Online Bill Payment

**N**ow available to Mobile County Water Customers is online bill payment at <u>www.mocowater.org</u> and the convenience of paying your bill by phone just call 1(866)514-4924. For your convenience, we offer bank draft services. Save money on gas and or postage. Become a bank draft customer today. Please fill out form on website at <u>www.mocowater.org</u> and submit to office with a cancelled check.

### **MOBILE COUNTY WATER, SEWER & FPA**

#### 2023 Annual Water Quality Report Tables (Testing Performed January through December 2022)

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	current
Nitrates	2022
Radioactive Contaminants	2021
Synthetic Organic Contaminants (including pesticides and herbicides)	2022
Volatile Organic Contaminants	2022
Disinfection By-products	2022
DSE Disinfection By-products	2018
Unregulated Contaminant Monitoring Rule 4 (UCMR4) contaminants	2019
PFAS Contaminants	2022

DETECTED DRINKING WATER CONTAMINANTS							
	Violation	Level	Unit			Likely Source	
Contaminants	Y/N	Detected	Msmt	MCLG	MCL	of Contamination	
Alpha emitters	NO	4.26	PCi/l	0	15	Erosion of natural deposits	
Combined radium	NO	Annual 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	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	ppm	0	AL=0.015	Corrosion of household plumbing systems; erosion of natural deposits	
Nitrate (as Nitrogen)	NO	0.16-0.22	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
TTHM [Total trihalomethanes]	NO	LRAA 71.0 (40.0-83.0)	ppb	0	80	By-product of drinking water chlorination	
HAA5 [Total haloacetic acids]	NO	LRAA 23.5 (15.0-28.0)	ppb	0	60	By-product of drinking water chlorination	
Unregulated Contaminants		· · · · ·					
Chloroform	NO	ND-14.0	ppb	70	n/a	Naturally occurring; industrial discharge; agricultural runoff	
Bromodichloromethane	NO	ND-9.60	ppb	0	n/a	Naturally occurring; industrial discharge; agricultural runoff	
Chlorodibromomethane	NO	ND-5.50	ppb	60	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	
рН	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  $90^{th}$  percentile and # of sites above the Action Level = 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	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 <u>www.epa.gov/pfas</u>.

PFAS CONTAMINANTS (in ppb)								
Contaminant		Level	Contaminant	Unit	Level			
	wsmt	Detected		wismt	Detected			
11CI-PF3OUdS (11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid)	ppb	ND	Perfluoroheptanoic acid	ppb	ND			
9CI-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						

#### **Monitoring Non-compliance Notice**

Mobile County Water & Fire Protection Authority is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether your drinking water meets health standards. During January 2020 – December 2022, we did not monitor two samples for Synthetic Organic Chemicals (SOC) on the Boykin Road Well during one calendar year and therefore cannot be sure of the quality of your drinking water during that time.

Please share the information about these violations 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.

Upon discovery of this oversight, we collected samples for Synthetic Organic Chemicals (SOC) on the Boykin Road Well, and results were well within compliance levels. We will continue to monitor your drinking water according to Federal and State laws. If you have any questions about these violations or our monitoring requirements, please contact Andy Ladner or Joe Summersgill at the Mobile County Water office at 5780 Theodore Dawes Rd in Theodore or by phone at 251-653-7346.

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			
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 - Butylbe	nzene			
1,1,1,2-Tetrachloroethane	Aldicarb Sulfoxide		Chloromethane	Naphthalene				
1,1,2,2-Tetrachloroethane	Aldrin		Dibromomethane	N-Propylbenzene				
1,1-Dichloroethane	Atrazine		Dicamba	P-Chlorotoluene				
1,2,3 - Trichloropenzene	Bromobenzene		Dichlorodifiuoromethane	P-leopropyltoluono				
1,2,3 - Trichloropropane	Bromochloromethane		Dielarin	P-Isopropyitoluene Propachlor				
1.3 – Dichloropropage	Bromodichloromethane			Sec - Butylbenzono				
1 3 – Dichloropropene	Bromome	thane	M-Dichlorobenzene	Tert - Rutul	henzene			
1 3 5 - Trimethylbenzene	Butachlor		Methomyl	Trichlorfluoromethano				
2.2 – Dichloropropane	Carbarvl		MTBF					
3-Hydroxycarbofuran	Chlorodik	promomethane	Metolachlor					
Aldicarb	Chloroethane		Metribuzin					