

## UCMR5

The Safe Drinking Water Act (SDWA) requires that once every five years the EPA issues a list of unregulated contaminants to be monitored by public water systems (PWSs).

The fifth Unregulated Contaminant Monitoring Rule (UCMR 5) was published on December 27, 2021. UCMR 5 requires sample collection for 30 chemical contaminants between 2023 and 2025 using analytical methods developed by the EPA and consensus organizations. This action provides the agency and other interested parties with scientifically valid data on the national occurrence of these contaminants in drinking water. Below is a list of the contaminants that are being tested for during the UCMR5 along with their results.

Unregulated Contaminant Rule 5 (UCMR5) Contaminants					
Contaminants	Unit Msmt	Level Detected	Contaminant	Unit Msmt	Level Detected
lithium	ppb	ND	PFHxA	ppb	ND
11Cl-PF3OUdS	ppb	ND	PFHxS	ppb	ND
4:2 FTS	ppb	ND	PFMBA	ppb	ND
6:2 FTS	ppb	ND	PFMPA	ppb	ND
8:2 FTS	ppb	ND	PFNA	ppb	ND
9Cl-PF3ONS	ppb	ND	PFOA	ppb	ND
ADONA	ppb	ND	PFOS	ppb	ND
HFPO-DA	ppb	ND	PFPeA	ppb	ND
NFDHA	ppb	ND	PFPeS	ppb	ND
PFBA	ppb	ND	PFUnA	ppb	ND
PFBS	ppb	ND	NEiFOSAA	ppb	ND
PFDA	ppb	ND	NMeFOSAA	ppb	ND
PFDoA	ppb	ND	PFTA	ppb	ND
PFEEESA	ppb	ND	PFTrDA	ppb	ND
PFHpA	ppb	ND			
PFHpS	ppb	ND			

## NONCOMPLIANCE NOTICE

The water system incurred a public notice violation by failing to provide the required public notice of the July 2022 DBP monitoring violation to a local communications medium. The system provided the public notice to the local communications medium and submitted the certification form to address the public notice violation and returned to compliance on December 21, 2023.

## GENERAL INFORMATION

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 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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

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 individuals with other immune system disorders, some elderly, and infants, can be particularly at risk from infections. Those at risk should seek advice about drinking water from the health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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. **More information about contaminants and potential health effects can be obtained by call the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).**

**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:** 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. Bayou La Batre 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>

Based on a study conducted by the 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.

**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 two 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.**

We at The Utilities Board of The City of Bayou La Batre work around the clock to provide top quality water to every tap. 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 water sources, which are the heart of our community, our way of life and our children's future.

## PLAIN LANGUAGE DEFINITION

- **Non-Detects (ND)** - laboratory analysis indicates that the contaminant is not present.
- **Not Required (NR)** - Laboratory analysis not required due to waiver granted by the Environmental Protection Agency for the State of Alabama.
- **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** - 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 (nanograms/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 (picograms/l)** - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.
- **Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.
- **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.
- **Variances & Exemptions (V&E)** - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
- **Action Level - (AL)** the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Treatment Technique (TT)** - (mandatory language) A treatment technique is 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.
- **Maximum Contaminant Level** - (mandatory language) 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** - (mandatory language) 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 or 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 or 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.

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 run-off, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

# Annual Drinking Water Quality Report

## The Utilities Board of the City of Bayou La Batre

### January-December 2023

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. Bayou La Batre has two well sources pumping out of the Miocene-Pliocene Aquifer located in the Irvington area. The water we provide for our customers does require specialized treatment. In addition to filtration, **Chlorine is added** for disinfection purposes. **Aqua Mag is added** for corrosion control and **Hydrated Lime** for pH balance. Bayou La Batre has completed the **Source Water Protection Plan** that may be viewed at The Utilities Board Office during normal business hours. It provides more information such as potential sources of contamination. I'm pleased to report that our drinking water meets federal and state requirements. We are committed to ensuring the quality of your water. We also have two emergency connections with Grand Bay Water Works Board and St. Elmo-Irvington Water Authority.

If you have questions about this report or concerning your water utility, please **contact Dan McCrory, Director, or Joe Webber, Water & Sewer Operations Supervisor, at 251-824-2172.** We want our valued customers to be informed about their water utility. If you want to learn more, please attend our regularly scheduled **meetings held on the third Tuesday of each month at the office located at 13321 N. Wintzell Avenue, starting at 5:30 PM.**

## BOARD MEMBERS

 **Sylvia Raley, Chairperson**

 **Roger Milne**

 **Jeffrey Ladnier**

 **Virginia Bryant, Secretary**

 **Kimberlyn Barbour**



Bayou La Batre routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2023. 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.

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
<b>Bacteriological</b>			Selenium(ppb)	50	ND	Epichlorohydrin	TT	ND
Total Coliform Bacteria	< 5%	ND	Thallium(ppb)	2	ND	Ethylbenzene(ppb)	700	0.0007
Turbidity	TT	0.45	<b>Organic Chemicals</b>			Ethylene dibromide(ppb)	50	ND
Fecal Coliform & E. coli	0	ND	Acrylamide	TT	ND	Glyphosate(ppb)	700	ND
<b>Radiological</b>			Atrazine(ppb)	2	ND	Haloacetic Acids(ppb)	60	ND
Beta/Photon emitters (mrem/yr)	4	ND	Atrazine(ppb)	3	ND	Heptachlor(ppb)	400	ND
Alpha emitters (pci/l)	15	0.404+/-0.856	Benzene(ppb)	5	ND	Heptachlor epoxide(ppb)	200	ND
Combined radium (pci/l)	5	0.563+/-0.338	Benzo(a)pyrene(PHAs)(ppt)	200	ND	Hexachlorobenzene(ppb)	1	ND
Uranium(pci/l)	30	ND	Carbofuran(ppb)	40	ND	Hexachlorocyclopentadiene(ppb)	50	ND
<b>Inorganic</b>			Carbon Tetrachloride(ppb)	5	ND	Lindane(ppb)	200	ND
Antimony (ppb)	6	ND	Chlordane(ppb)	2	ND	Methoxychlor(ppb)	40	ND
Arsenic (ppb)	10	0.00	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	0.04	Dalapon(ppb)	200	ND	Picloram(ppb)	500	ND
Beryllium (ppb)	4	ND	Dibromochloropropane(ppb)	200	ND	PCBs(ppb)	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	2.06	1,1-Dichloroethylene(ppb)	7	ND	Toluene(ppm)	1	0.00037
Chlorine dioxide(ppb)	800	0.39	Cis-1,2-Dichloroethylene(ppb)	70	ND	TOC	TT	ND
Chlorite(ppm)	1	ND	trans-1,2-Dichloroethylene(ppb)	100	ND	TTHM(ppb)	80	2.70
Chromium (ppb)	100	ND	Dichloromethane(ppb)	5	ND	Toxaphene(ppb)	3	ND
Copper (ppm)	AL=1.3	0.03	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	0.0031
Fluoride (ppm)	4	ND	Di(2-ethylhexyl)phthlates(ppb)	6	ND	1,1,1-Trichloroethane(ppb)	200	ND
Lead (ppb)	AL=15	0.0016	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	0.044	Diquat(ppb)	20	ND	Vinyl Chloride(ppb)	2	ND
Nitrite (ppm)	1	ND	Endothal(ppb)	100	ND	Xylenes(ppm)	10	0.008
Total Nitrate & Nitrite	10	0.044	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
<b>Secondary</b>								
Aluminum	0.2	0.05	Foaming Agents	0.5	ND	Silver	7	0.000305
Chloride	250	20.25	Iron	0.3	0.21	Sulfate	70	7.6
Color (PCU)	15	2.50	Magnesium	75	1.17	Total Dissolved Solids	500	143
Copper	1	0.007	Odor (T.O.N.)	5	ND	Zinc	5	0.00465
<b>Special</b>								
Calcium	N/A	19.40	pH (SU)	N/A	7.55	Temperature (*C)	N/A	27.30
Carbon Dioxide	N/A	10.655	Sodium	N/A	16.15	Total Alkalinity	N/A	65.9
Manganese	0.05	0.019	Specific Conductance (umhos)	N/A	193.50	Total Hardness (as CaCO3)	N/A	56.75
<b>Unregulated</b>								
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	0.0018	M-Dichlorobenzene	N/A	ND
1,2,3 - Trichlorobenzene	N/A	ND	Bromoform	N/A	0.000195	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	0.00353	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	0.0009	Chloroform	N/A	0.0017	N-Propylbenzene	N/A	0.000315
2,2 - Dichloropropane	N/A	ND	Chloromethane	N/A	ND	O-Chlorotoluene	N/A	ND
3-Hydroxycarbofuran	N/A	ND	Dibromochloromethane	N/A	0.00085	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	Dieldrin	N/A	ND	Sec - Butylbenzene	N/A	ND
Aldrin	N/A	ND	Fluorotrichloromethane	N/A	ND	Tert - Butylbenzene	N/A	ND

Table of Detected Drinking Water Contaminants								
CONTAMINANT	MCLG	MCL	Range		Amount Detected		Likely Source of Contamination	
<b>Bacteriological Contaminants January - December</b>								
Total Coliform Bacteria	0	< 5%			ND			Naturally present in the environment
Turbidity	0	TT			0.45			Soil runoff
Fecal Coliform & E. coli	0	0			ND			Human and animal fecal waste
Viruses, Giardia	0	TT			0			Human and animal fecal waste
Legionella	0	TT			0			Found naturally in water; multiplies in heating systems
<b>Radiological Contaminants January - December</b>								
Beta particle and photon	0	4			ND		mrem/yr	Decay of natural and man-made deposits
Alpha emitters	0	15			0.404+/-0.856		pCi/L	Erosion of natural deposits
Combined Radium 226 & 228	0	5			0.563+/-0.338		pCi/L	Erosion of natural deposits
Uranium	0	30			ND		pCi/L	Erosion of natural deposits
<b>Inorganic Contaminants January - December</b>								
Arsenic	0	10	ND	-	0.00056	0.00028	ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	2	2	0.036	-	0.052	0.044	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine	MRDLG 4	MRDL 4	1.11	-	3.00	2.06	ppm	Water additive used to control microbes
Chlorine Dioxide	MRDLG 800	MRDL 800	ND	-	0.77	0.39	ppb	Water additive used to control microbes
Copper	1.3	10 Sites AL=1.3	No. of Sites above action level		0	0.030	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	0	10 Sites AL=15	No. of Sites above action level		0	0.0016	ppb	Corrosion of household plumbing systems; erosion of natural deposits
Nitrate (as N)	10	10	0.042	-	0.045	0.044	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as N)	1	1	ND	-	ND	ND	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Nitrate & Nitrite	10	10	0.042	-	0.045	0.044	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Organic Contaminants January - December</b>								
Ethylbenzene	700	700	ND	-	0.0013	0.0007	ppb	Discharge from petroleum refineries
Toluene	1	1	ND	-	0.00074	0.00037	ppm	Discharge from petroleum factories
Total Organic Carbon (TOC)	N/A	TT	ND	-	ND	ND	TT	Naturally present in the environment
Total trihalomethanes (TTHM)	0	80	2.10	-	3.30	2.70	ppb	By-product of drinking water chlorination
1,2,4-Trichlorobenzene	70	70	ND	-	0.0061	0.0031	ppb	Discharge from textile-finishing factories
Xylene (total)	10	10	0.0012	-	0.015	0.008	ppm	Discharge from petroleum factories; discharge from chemical factories
<b>Secondary Contaminants January - December</b>								
Aluminum	N/A	0.2	0.049	-	0.06	0.05	ppm	Erosion of natural deposits or as a result of treatment with water additives
Chloride	N/A	250	7.50	-	33.00	20.25	ppm	Naturally occurring in the environment or as a result of agricultural runoff
Color	N/A	15	ND	-	5.00	2.50	PCU	Naturally occurring in the environment or as a result of treatment with water additives
Copper	N/A	1	ND	-	0.013	0.007	ppm	Erosion of natural deposits; leaching from pipes
Iron	N/A	0.3	0.13	-	0.28	0.21	ppm	Erosion of natural deposits
Magnesium	N/A	0.05	1.05	-	1.28	1.17	ppm	Erosion of natural deposits
Silver	N/A	0.1	ND	-	0.000061	0.000031	ppm	Erosion of natural deposits
Sulfate	N/A	250	7.20	-	8.00	7.60	ppm	Naturally occurring in the environment
Total Dissolved Solids	N/A	500	111.00	-	175.00	143.00	ppm	Erosion of natural deposits
Zinc	N/A	5	ND	-	0.0093	0.0047	ppm	Erosion of natural deposits
<b>Special Contaminants January - December</b>								
Calcium	N/A	N/A	17.70	-	21.10	19.40	ppm	Erosion of natural deposits
Carbon Dioxide	N/A	N/A	2.81	-	18.50	10.66	ppm	Erosion of natural deposits
Manganese	N/A	N/A	0.005	-	0.032	0.019	ppm	Erosion of natural deposits
pH	N/A	N/A	6.70	-	8.40	7.55	SU	Naturally occurring in the environment or as a result of treatment with water additives
Sodium	N/A	N/A	5.90	-	26.40	16.15	ppm	Naturally occurring in the environment
Specific Conductance	N/A	<500	148.00	-	239.00	193.50	umhos	Naturally occurring in the environment or as a result of treatment with water additives
Temperature	N/A	N/A	27.10	-	27.50	27.30	-C	Naturally occurring in the environment
Total Alkalinity	N/A	N/A	54.90	-	76.90	65.90	ppm	Erosion of natural deposits
Total Hardness (as CaCO3)	N/A	N/A	55.40	-	58.10	56.75	ppm	Naturally occurring in the environment or as a result of treatment with water additives
<b>Unregulated Contaminants January - December</b>								
1,2,4 - Trimethylbenzene	N/A	N/A	0.00096	-	0.0061	0.00353	ppm	Residual of petroleum additive
1,3,5 - Trimethylbenzene	N/A	N/A	ND	-	0.0018	0.0009	ppm	Used in photographic development and solvents
Bromodichloromethane	N/A	N/A	0.0017	-	0.0018	0.00175	ppb	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by-product of chlorination
Bromoform	N/A	N/A	ND	-	0.00039	0.000195	ppm	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by-product of chlorination
Chloroform	N/A	N/A	0.0012	-	0.0021	0.00165	ppb	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by-product of chlorination
Dibromochloromethane	N/A	N/A	ND	-	0.0017	0.00085	ppm	Naturally occurring in the environment
N-Propylbenzene	N/A	N/A	ND	-	0.00063	0.000315	ppm	Naturally occurring in the environment