Annual Drinking Water Quality Report

The Utilities Board of the City of Bayou La Batre

January-December 2020

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 to our customers requires no specialized treatment. However**, chlorine is added** for disinfection purposes. **Aqua Mag is added** for corrosion control and 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 is safe and 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 **call 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 Thursday of each month at the office located on 13321 N. Wintzell Avenue, 5:30 PM.**

BOARD MEMBERS

Sylvia Raley, Chairperson **Roger Milne** **Jeffery Ladnier**

Virginia Bryant, Secretary **Kimberlyn Barbour**

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.

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 1st to December 31st, 2020**.** 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
Bacteriological			Selenium(ppb)	50	ND	Epichlorohydrin	TT	ND
Total Coliform Bacteria	< 5%	ND	Thallium(ppb)	2	ND	Ethylbenzene(ppb)	700	ND
Turbidity	TT	0.44	Organic Chemicals			Ethylene dibromide(ppt)	50	ND
Fecal Coliform & E. coli	0	ND	Acrylamide	TT	ND	Glyphosate(ppb)	700	ND
Radiological			Alachlor(ppb)	2	ND	Haloacetic Acids(ppb)	60	7.50
Beta/photon emitters (mrem/yr)	4	ND	Atrazine(ppb)	3	ND	Heptachlor(ppt)	400	ND
Alpha emitters (pci/l)	15	1.19+/-1.43	Benzene(ppb)	5	ND	Heptachlor epoxide(ppt)	200	ND
Combined radium (pci/l)	5	.773+/-.473	Benzo(a)pyrene[PHAs](ppt)	200	ND	Hexachlorobenzene(ppb)	1	ND
Uranium(pci/l)	30	ND	Carbofuran(ppb)	40	ND	Hexachlorocyclopentadiene(ppb)	50	ND
Inorganic			Carbon Tetrachloride(ppb)	5	ND	Lindane(ppt)	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	0.05	Dalapon(ppb)	200	ND	Picloram(ppb)	500	ND
Beryllium (ppb)	4	ND	Dibromochloropropane(ppt)	200	ND	PCBs(ppt)	500	ND
Bromate(ppb)	10	ND	O-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	3.50	1,1-Dichloroethylene(ppb)	7	ND	Toluene(ppm)	1	ND
Chlorine dioxide(ppb)	800	ND	Cis-1,2-Dichloroethylene(ppb)	70	ND	TOC	TT	ND
Chlorite(ppm)	1	ND	trans-1,2-Dichloroethylene(ppb)	100	ND	TTHM(ppb)	80	9.30
Chromium (ppb)	100	ND	Dichloromethane(ppb)	5	ND	Toxaphene(ppb)	3	ND
Copper (ppm)	AL=1.3	0.22	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	ND
Fluoride (ppm)	4	0.11	Di(2-ethylhexyl)phthlates(ppb)	6	ND	1,1,1-Trichloroethane(ppb)	200	ND
Lead (ppb)	AL=15	1.70	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	0.16	Diquat(ppb)	20	ND	Vinyl Chloride(ppb)	2	ND
Nitrite (ppm)	1	ND	Endothall(ppb)	100	ND	Xylenes(ppm)	10	0.00
Total Nitrate & Nitrite	10	0.16	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 occurance of unregulated contaminants in drinking water and whether future regulation is warranted.

CONTAMINANT	MCL	DETECT	CONTAMINANT	MCL	DETECT	CONTAMINANT	MCL	DETECT
Secondary								
Aluminum	0.2	0.02	Foaming Agents	0.5	ND	Silver	7	0.000061
Chloride	250	25.00	Iron	0.3	0.76	Sulfate	70	7.3
Color (PCU)	15	5.00	Magnesium	75	1.00	Total Dissolved Solids	500	150
Copper	1	ND	Odor (T.O.N.)	3	ND	Zinc	5	0.0093
Special								
Calcium	N/A	11.90	pH (SU)	N/A	7.28	Temperature (°C)	N/A	22.30
Carbon Dioxide	N/A	2.81	Sodium	N/A	26.20	Total Alkalinity	N/A	54.9
Manganese	0.05	0.02	Specific Conductance (umhos)	<500	190.00	Total Hardness (as CaCO3)	N/A	34
Unregulated								
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	0.0011	M-Dichlorobenzene	N/A	ND
1,2,3 - Trichlorobenzene	N/A	ND	Bromoform	N/A	ND	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	ND	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	ND	Chloroform	N/A	0.0019	N-Propylbenzene	N/A	ND
2,2 - Dichloropropane	N/A	ND	Chloromethane	N/A	ND	O-Chlorotoluene	N/A	ND
3-Hydroxycarbofuran	N/A	ND	Dibromochloromethane	N/A	ND	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	Fluorotrichloromethan	N/A	ND	Tert - Butylbenzene	N/A	ND
PFAS Compounds								
CONTAMINANT	RESULTS	UNITS	CONTAMINANT	RESULTS	UNITS	CONTAMINANT	RESULTS	UNITS
11Cl-PF3OUdS	ND	ug/L	Perfluorodecanoic Acid	ND	ug/L	Perfluorooctanoic Acid	ND	ug/L
9Cl-PF3ONS	ND	ug/L	Perfluorohexanoic Acid	ND	ug/L	Perfluorotetradecanoic Acid	ND	ug/L
ADONA	Cu	ug/L	Perfluorododecanoic Acid	ND	ug/L	Perfluorotridecanoic Acid	ND	ug/L
HFPO-DA	ND	ug/L	Perfluoroheptanoic Acid	ND	ug/L	Perfluoroundecanoic Acid	ND	ug/L
NEtFOSAA	ND	ug/L	Perfluorohexanesulfonic Acid	ND	ug/L	Total PFAs	ND	ug/L
NMeFOSAA	ND	ug/L	Perfluorononanoic Acid	HAA5	ug/L			ug/L
Perfluorobutanesulfonic Acid	ND	ug/L	Perfluorooctanesulfonic Acid	ND	ug/L			ug/L

Table of Detected Drinking Water Contaminants

CONTAMINANT	MCLG	MCL	Range			Amount Detected		Likely Source
Bacteriological Contaminants						**January - December 2020**		
Total Coliform Bacteria	0	< 5%				ND	Present or Absent	Naturally present in the en
Turbidity	0	TT				0.44	NTU	Soil runoff
Radiological Contaminants						**January - December 2020**		
Beta particle and photon	0	4				ND	mrem/yr	Decay of natural and man-
Alpha emitters	0	15				1.19+/-1.43	pCi/L	Erosion of natural deposits
Combined Radium 226 & 228	0	5				.773+/-.473	pCi/L	Erosion of natural deposits
Uranium	0	30				ND	pCi/L	Erosion of natural deposits
Inorganic Contaminants						**January - December 2020**		
Arsenic	0	10	ND	-	0.00	0.00	ppb	Erosion of natural deposits from glass and electronics
Barium	2	2	ND	-	0.05	0.05	ppm	Discharge of drilling waste refineries; erosion of natura
Chlorine	MRDLG 4	MRDL 4	1.00	-	3.50	3.50	ppm	Water additive used to co
Copper	1.3	10 Sites AL=1.3	No. of Sites above action level 0			0.22	ppm	Corrosion of household pl natural deposits; leaching f
Cyanide	200	200	ND	-	ND	ND	ppb	Discharge from steel/metal plastic and fertilizer factori
Fluoride	4	4	ND	-	0.11	0.11	ppm	Water additive which pron natural deposits; discharge factories
Lead	0	10 Sites AL=15	No. of Sites above action level 0			1.70	ppb	Corrosion of household pl natural deposits
Nitrate (as N)	10	10	ND	-	0.16	0.16	ppm	Runoff from fertilizer use; l sewage; erosion of natural
Nitrite (as N)	1	1	ND	-	ND	ND	ppm	Runoff from fertilizer use; l sewage; erosion of natural
Total Nitrate & Nitrite	10	10	ND	-	0.16	0.16	ppm	Runoff from fertilizer use; l sewage; erosion of natural
Organic Contaminants						**January - December 2020**		
Haloacetic Acids (HAA5)	0	60	1.10	-	7.50	7.50	ppb	By-product of drinking wa
Total trihalomethanes (TTHM)	0	80	4.70	-	9.30	9.30	ppb	By-product of drinking wa
Xylene (total)	10	10	ND	-	0.00	0.00	ppm	Discharge from petroleum chemical factories
Secondary Contaminants						**January - December 2020**		
Aluminum	N/A	0.2	ND	-	0.02	0.02	ppm	Erosion of natural deposits water additives
Chloride	N/A	250	ND	-	25.00	25.00	ppm	Naturally occuring in the agricultural runoff
Color	N/A	15	ND	-	5.00	5.00	PCU	Naturally occuring in the treatment with water addit
Iron	N/A	0.3	ND	-	0.76	0.76	ppm	Erosion of natural deposits
Magnesium	N/A	0.05	ND	-	1.00	1.00	ppm	Erosion of natural deposits
Silver	N/A	0.1	ND	-	0.00	0.00	ppm	Erosion of natural deposits
Sulfate	N/A	250	ND	-	7.30	7.30	ppm	Naturally occuring in the
Total Dissolved Solids	N/A	500	ND	-	150.00	150.00	ppm	Erosion of natural deposits
Zinc	N/A	5	ND	-	0.01	0.01	ppm	Erosion of natural deposits
Special Contaminants						**January - December 2020**		
Calcium	N/A	N/A	ND	-	11.90	11.90	ppm	Erosion of natural deposits
Carbon Dioxide	N/A	N/A	ND	-	2.81	2.81	ppm	Erosion of natural deposits
Manganese	N/A	N/A	ND	-	0.02	0.02	ppm	Erosion of natural deposits
pH	N/A	N/A	ND		7.38	7.38	SU	Naturally occuring in the

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 EPA has determined that your water IS SAFE at these levels.

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 Crytosporidium 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.

The Utilities Board Bayou La Batre incurred three (3) reporting violations. Synthetic Organic Chemicals (SOC), Volatile Organic Chemicals (VOC), and radiological contaminants (RAD) were reporting non-compliances. The non-compliances resulted from a failure to submit the January - March 2020 results by April 10, 2020. Due to COVID, our lab was short staffed and unable to upload our results by April 10, 2020. The results were uploaded on April 20, 2020.

ADEM Admin. Code r. 335-7-2-.20(1)(a) states, "the supplier of water shall report to the Department the results of any test, measurement or analysis within the first 10 days following the month in which the result is received or the first 10 days following the end of the required monitoring period as stipulated by the Department, whichever is shortest."

Our system had no violations of allowable *limits* of contaminants in drinking water. We're proud that your drinking water meets or exceeds all Federal and State requirements. The EPA has determined that your water IS SAFE.

For any questions or concerns, please contact our office at 251-824-2172