

2022 CONSUMER CONFIDENCE REPORT (CCR)

Galveston County MUD #12

(PWS ID: TX0840021)

Annual Water Quality Report for the period of January 1 to December 31, 2022

THIS REPORT IS INTENDED TO PROVIDE YOU WITH IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER AND THE EFFORTS MADE BY THE WATER SYSTEM TO PROVIDE SAFE DRINKING WATER.



Issued June 2023

Where do we get our drinking water?

The source of drinking water used by Galveston County MUD #12 is purchased surface water from the Gulf Coast Water Authority Texas City. The water comes from the Intake 1 – Canal (A). The TCEQ has completed a Source Water Assessment for all drinking water systems that own their sources. The report describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The system(s) from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system, contact Si Environmental. The complete source water assessment can be found at <http://dww.tceq.texas.gov/DWW/>

Galveston County MUD #12 was on interconnect with the Coastal Area Water Authority during the calendar year of 2022 for their water source. Attached you will find a copy of the regulated contaminant detected table for the Coastal Area Water Authority. If you require additional information about Gulf Coast Water Authority's water please call 409-935-2438.

PUBLIC PARTICIPATION OPPORTUNITIES

**DATE: BOARD OF DIRECTORS GENERALLY
MEET ON THE THIRD MONDAY
OF EACH MONTH.**

TIME: 6:00 P.M.

LOCATION: 2929 HWY 6, BAYOU VISTA, TX 77563

PHONE: 281-807-9500

To learn about future public meetings (concerning your drinking water), or to request one be scheduled, please call us or email us at cyp.customerservice@sienviro.com

Is my water safe?

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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. Contaminants that may be present in sources 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 runoff, 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, urban storm water runoff, and residential uses.

-Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, can also come from gas stations, urban storm water runoff, and septic systems.

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

ALL drinking water may contain contaminants

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices. 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 calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Information about Unregulated Contaminants

Unregulated contaminants are those for which the 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 regulations are warranted. Many constituents (such as calcium, sodium, or iron) which are often found in drinking water can cause taste, color, and odor problems but are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the systems business office.

En Español

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al teléfono (281)807-9500.

Special Notice

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immune-compromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids and people with HIV/AIDs or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800)426-4791.



SAVE WATER
SAVE THE EARTH

The State of Texas monitors for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Your Water	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2022	21	12.6 – 32.3	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2022	57	40.6 – 74.1	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2019	0.0712	0.0712 - 0.0712	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2020	20	20.0 - 20.0	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories
Fluoride	2019	0.21	0.21 - 0.21	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2022	1	0.24 – 0.56	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Synthetic Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2020	0.36	0.13 - 0.36	3	3	ppb	N	Runoff from herbicide used on row crops.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2019	4.9	4.9 - 4.9	0	50	pCi/L *	N	Decay of natural and man-made deposits.

* EPA Considers 50 pCi/L to be the level of concern for beta particles.

Maximum Residual Disinfectant Level

Year	Disinfectant	Minimum Level	Average Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2022	Chloramine	1.03	2.06	4.1	4.0	< 4.0	ppm	Disinfectant added to control microbes

ORGANIC CONTAMINANTS – NOT TESTED FOR OR NOT DETECTED

FECAL COLIFORM-NONE DETECTED

Total Coliform-None Detected

TURBIDITY – NOT REQUIRED

UNREGULATED CONTAMINANTS – NOT TESTED FOR OR NOT DETECTED

E.Coli – None Detected

If a water system has performed additional monitoring which indicates the presence of other contaminants in the finished water, TCEQ recommends that systems find out if EPA has proposed a National Primary Drinking Water Regulation or issued a health advisory for that contaminant by calling the Safe Drinking Water Hotline (800-426-4791). TCEQ considers detects above a proposed MCL or health advisory level to indicate possible health concerns. To learn more about your water, please refer to the Source Water Assessment Viewer available at the following URL:

<http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=>

Unregulated Contaminants

Unregulated Contaminants	Collection Date	Your Water	Lowest Level Detected	Highest Level Detected	Units
Chlorodibromomethane	2022	23.2	14.7	31.5	ppb
Chloroform	2022	5.24	2.8	7.5	ppb
Bromoform	2022	12.9	5.1	26.2	ppb
Bromodichloromethane	2022	15.2	13.7	18.2	ppb

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.

LEAD AND COPPER

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. LAKE MUD 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](http://www.epa.gov/safewater/lead).

Lead/Copper	Year	MCLG	Action Level	The 90 th Percentile	# of Sites Over AL	Units	Was This a Violation	Likely Source of Contaminant
Copper	2020	1.3	1.3	0.0562	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2020	0	15	0	0	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits.

LEAD AND COPPER RULE PROTECTS PUBLIC HEALTH BY MINIMIZING LEAD AND COPPER LEVELS IN DRINKING WATER, PRIMARILY BY REDUCING WATER CORROSIVITY. LEAD AND COPPER ENTER DRINKING WATER MAINLY FROM CORROSION OF LEAD AND COPPER IN PLUMBING MATERIALS.

Abbreviations and Definitions

PPQ - parts per quadrillion, or picograms per liter

NTU - Nephelometric Turbidity Units

MFL - million fibers per liter (a measure of asbestos)

pCi/L - picocuries per liter (a measure of radioactivity)

PPM - parts per million, or milligrams per liter (mg/L)

PPB - parts per billion, or micrograms per liter (ug/L)

PPT - parts per trillion, or nanograms per liter

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 contamination.

Maximum Residual Disinfectant level (MRDL) –The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant in necessary for control of microbial contaminants.

Maximum Contaminant Level (MCL) – The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) – The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

Treatment Technique – A required process intended to reduce the level of a contaminant in drinking water.

Action Level – The concentration of a contaminant, which if exceeded triggers treatment or other requirements, which a water system must follow.

Action Level Goal (ALG)- The level of contaminant in drinking water below which there is not known or expected risk to health. ALGs allow for a margin of safety.

MRREM/year- millirems per year (a measure of radiation absorbed by the body)

NA - not applicable

Maximum Residual Disinfectant level (MRDL) –The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

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 contamination.

Level 1 Assessment - A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment - A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Gulf Coast Water Authority

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2022	0.0944	0.0944 - 0.0944	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2022	20	20.0 - 20.0	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories
Synthetic Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2022	0.1	0.5 - 0.5	3	3	ppb	N	Runoff from herbicide used on row crops.

2022 Chlorite Data

POE Chlorite Samples

Month	Maximum mg/L	Minimum mg/L	Average mg/L
January	0.54	0.18	0.40
February	0.45	0.09	0.29
March	0.48	0.06	0.29
April	0.37	0.09	0.21
May	0.20	0.06	0.15
June	0.26	0.10	0.17
July	0.38	0.05	0.18
August	0.46	0.19	0.31
September	0.45	0.26	0.33
October	0.60	0.12	0.34
November	0.34	0.10	0.18
December	0.42	0.16	0.33
Average	0.41	0.12	0.27
Maximum	0.60	0.26	0.40
Minimum	0.20	0.05	0.15

2022 Chlorine Dioxide Data

POE Chlorine Dioxide

Month	Maximum ppb	Minimum ppb
January	20	0
February	0	0
March	0	0
April	40	0
May	60	0
June	40	0
July	30	0
August	50	0
September	50	0
October	60	20
November	160	30
December	280	40
Average	66	8
Maximum	280	40
Minimum	0	0

2022 Turbidity Summary

Month	Highest NTU	Average NTU	% Samples < 0.3 NTU
January	0.14	0.06	100.0%
February	0.53	0.14	99.4%
March	0.33	0.13	100.0%
April	0.34	0.14	100.0%
May	0.14	0.10	100.0%
June	0.32	0.13	100.0%
July	0.26	0.17	100.0%
August	0.21	0.13	100.0%
September	0.19	0.09	100.0%
October	0.14	0.11	100.0%
November	0.10	0.07	100.0%
December	0.16	0.08	100.0%
Average	0.10	0.06	
Maximum	0.53	0.17	
Minimum	0.24	0.11	

	2022 TOC Removal at WTP POE					
Month	Raw mg/L	Alk mg/L	POE mg/L	Removal %	TCEQ %	Ratio
January	4.33	152	2.82	34.80	25.00	1.39
February	5.02	138	3.17	36.20	25.00	1.45
March	5.31	135	3.04	42.70	25.00	1.71
April	5.61	135	3.64	34.80	27.50	1.27
May	5.22	150	3.30	36.70	25.00	1.47
June	5.31	144	3.34	37.10	25.00	1.49
July	5.17	155	3.58	30.70	25.00	1.23
August	5.19	160	3.68	29.10	25.00	1.16
September	5.24	155	3.68	29.60	25.00	1.18
October	5.25	172	3.72	29.10	25.00	1.16
November	4.86	162	3.54	27.20	25.00	1.09
December	4.63	144	3.26	29.50	25.00	1.18
Average	5.10	150.17	3.40	33.13	25.21	1.32
Maximum	5.61	172.00	3.72	42.70	27.50	1.71
Minimum	4.33	135.00	2.82	27.20	25.00	1.09