CITY OF ALAMO

2022 ANNUAL DRINKING WATER QUALITY REPORT (CONSUMER CONFIDENCE REPORT)

(956) 787-2232 (956) 787-8321 (956) 787-0006

SPECIAL NOTICE: Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (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.

PUBLIC PARTICIPATION: Regular Commissioner's meetings are held the 1st and 3rd Tuesdays of the month, at 6:00 pm, in the Municipal Building located at 420 N Tower Road, Alamo, Texas.

ALL DRINKING WATER MAY CONTAIN CONTAMINANTS. When drinking water meets federal standards, there may not be a health-based benefit to purchasing bottled water or point of use devices. Drinking water, including bottled water, might 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. Information about contaminants and potential health effects can be obtained by calling the EPA's safe drinking water hotline at 1-800-426-4791.

The TCEQ completed an assessment of our water and results indicate that our sources have a low susceptibility to contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confident Report. In order to ensure that tap water is safe to drink, EPA prescribes regulations which 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. For more information on source water assessments and protection efforts at our system contact Robert Salinas at (956)787-0006.

Este informe incluye informacion importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en espanol, favor de llamar al tel. (956) 787-2232 para hablar con una persona bilingue en espanol.

NOTICE MAILED 06/28/2023

WATER SOURCES: Our raw water supply is derived from the Rio Grande River and is delivered to us via numerous miles of river, dams, cement canals and cement piping which is owned and operated by the Hidalgo County Irrigation District No 2. As water is delivered, it dissolves naturally occurring minerals and even picks up substances resulting from the presence of animals or from human activity. TCEQ will be reviewing all of Texas drinking water sources. The source water assessment has been completed and the report, which will be available this year, will allow us to focus on our source water protection activities. Contaminants that might be expected in untreated water include: microbial contaminants such as viruses and bacteria; inorganic contaminants such as salts and metals; pesticides and herbicides, organic chemicals from industrial or petroleum use and radioactive contaminants resulting from oil and gas production and mining activities.

ABOUT THE ENCLOSED PAGES: the enclosed pages list all of the federally regulated or monitored constituents, which have been found in your drinking water, US EPA requires water systems to test up to 97 constituents.

SECONDARY CONSTITUENTS: Many constituents such as calcium, sodium, or iron, which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas not EPA. These constituents are not cause for health concerns. Therefore, secondary's are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

DEFINITIONS

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.
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.
TREATMENT TECHNIQUE (TT)-A required process intended to reduce the level of a contaminant in drinking water.
ACTION LEVEL (AL)-The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

ABBREVIATIONS:

NTU – Nephelometric Turbitity Units (a measure of turbidity)
pCi/l – picocuries per liter (a measure of radioactivity)
ppb – parts per billion or micrograms per liter (mg/l)
ppq – parts per quadrillion or pictograms per liter(pg/L)
MFL – million fibers per liter (a measure of asbestos)
ppm – parts per million or milligrams per liter (mg/l)
ppt – parts per trillion or nanograms per liter
na – not applicable

Recommended Additional Health Information for 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. This water supply 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 lead exposure by flushing your tap for 20 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 at www.epa.gov/safewater/lead.

LEAD AND COPPER

YEAR	CONTAMINANT	THE 90TH PERCENTILE	NUMBER OF SITES EXCEEDING ACTION LEVEL	ACTION LEVEL	UNIT OF MEASURE	MCLG	VIOLATION	SOURCE OF CONTAMINANT
2022	Lead	0.001	0	15	ppb	0	N	Corrosion of household plumbing systems; erosion of natural deposits.
2022	Copper	0.069	0	1.3	ppm	1.3	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

RADIOACTIVE CONTAMINANTS		AVERAGE LEVEL	MINIMUM LEVEL	MAXIMUM LEVEL	MCL	MCLG	UNIT OF MEASURE	
2020	Gross beta emitters	6.0	6.0	6.0	50	0	pCi/L	Decay of natural and man-made deposits.
2020	Gross alpha	4	4	4	15	0	pCi/L	Erosion of natural deposits.

ORGANIC CONTAMINANTS-Testing waived, not reported or none detected.

MAXIMUM RESIDUAL DISINFECTANT LEVEL-System must complete and submit disinfection data on the Surface Water Monthly Operations Report. On the CCR report, the system must provide disinfectant type, minimum, maximum and average levels.

YEAR	DISINFECTANT	AVERAGE LEVEL	MINIMUM LEVEL	MAXIMUM LEVEL	MRDL	MRDLG	UNIT OF MEASURE	SOURCE OF CHEMICAL
2022	Chlorine Dioxide	.1	.07	.42	.80	.80	ppm	water additive used to control microbes.

DISINFECTION BYPRODUCTS

YEAR	CONTAMINANT	AVERAGE LEVEL	MINIMUM LEVEL	MAXIMUM LEVEL	MCL	MCLG	UNIT OF MEASURE	SOURCE OF CONTAMINANT
2022	Total haloacetic acids	13	6.1	16.7	60		ppb	Byproduct of drinking water disinfection.
2022	Total Trihalomethanes	23	4.5	40.9	80		pbb	Byproduct of drinking water disinfection.
2022	Chlorite	.260	0.04	0.445	1	.08	ppm	Byproduct of drinking water disinfection

Unregulated Initial Distribution System Evaluation for Disinfection Byproducts – Waived or not yet sampled.

UNREGULATED CONTAMINANTS

Bromoform, chloroform, dislorobromomethane and dibromochloremethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

YEAR	CONTAMINANT	AVERAGE LEVEL	MINIMUM LEVEL	MAXIMUM LEVEL		UNIT OF MEASURE	SOURCE OF CONTAMINANT
2022	Chloroform	1.15	1.0	1.7		ppb	Byproduct of drinking water disinfection.
2022	Bromofrom	8.10	1.3	23.9	ppb		Byproduct of drinking water disinfection.
2022	Bromodichloromethane	2.4	1.2	4.7		ppb	Byproduct of drinking water disinfection.
2022	Dibromochloromethane	4.8	1.6	12.3	ppb		Byproduct of drinking water disinfection.

TURBIDITY is a measurement of the cloudiness of the water caused by suspended particles and has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These Organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

YEAR	CONTAMINANT	HIGHEST SINGLE MEASUREMENT	LOWEST MONTHLY % OF SAMPLES MEETING LIMITS	TURBIDITY LIMITS	UNIT OF MEASURE	SOURCE OF CONSTITUENT
2022	Turbidity	0.2	100.00	0.3	NTU	Soil runoff.

TOTAL ORGANIC CARBON (TOC) has no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report. The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations sections.

YEAR	CONTAMINANT	AVERAGE LEVEL	MINIMUM LEVEL	MAXIMUM LEVEL	UNIT OF MEASURE	SOURCE OF CONTAMINANT
2022	Source water	4.8	4.1	5.8	ppm	Naturally present in the environment.
2022	Drinking water	3.8	3.4	3.7	ppm	Naturally present in the environment.
2022	Removal ratio	20.6%	14.5%	41.9%	% removal*	N/A

*removal ratio is the percent of YOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed.

TOTAL COLIFORM bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

YEAR	CONTANIMANT	HIGHEST MONTHLY NUMBER OF POSITIVE SAMPLES	MCL	UNIT OF MEASURE	SOURCE OF CONTAMINANT
2022	Total Coliform	0	*		Naturally present in the environment.

*Two or more coliform found samples in any single month.

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Alamo, Texas 78516

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Secondary and Other Constituents Not Regulated – (No associated adverse health effects)

YEAR	CONSITUTENT	AVERAGE LEVEL	MINIMUM LEVEL	MAXIMUM LEVEL	SECONDARY LIMIT	UNIT OF MEASURE	SOURCE OF CONSTITUENT
2022	Bicarbonate	161	161	161	NA	ppm	Corrosion of carbonate rocks such as limestone.
2022	Chloride	278	278	278	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil filed activity.
2022	Hardness as Ca/Mg	396	396	396	NA	ppm	Naturally occurring calcium and magnesium
2022	pH	7.8	7.8	7.8	>7.0	units	Measure of corrosivity of water.
2022	Sodium	240	240	240	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2022	Sulfate	311	311	311	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2022	Total Alkalinity As CaCO3	132	132	132	NA	ppm	Naturally occurring soluble mineral salts.
2022	Total Dissolved Solids	1100	1100	1100	1000	ppm	Total dissolved mineral constituents in water.

INORGANIC CONTAMINANTS

YEAR	CONTAMINANT	HIGHEST LEVEL DETECTED	RANGES OF LEVEL DETECTED	MCLG	MCL	UNIT OF MEASURE	SOURCE OF CONTAMINENT
2022	ARSENIC	3	2.8	0	10	ppb	Erosion of natural deposits;Runoff from orchards;Runoff from glass and electronics production wastes.
2022	Barium	0.108	0.108 - 0.108	2	2	ppm	Discharge of drilling wastes;Discharge from metal refineries;Erosion of natural deposits
2022	Nitrate(measured as Nitrogen)	1	.0.95 – 0.95	10	10	ppm	Runoff from fertilizer use;Leaching from septic tanks,sewage;Erosion of natural deposits
2022	Nitrite(measured As Nitrogen)	.01	.01 - .01	1	1	ppm	Runoff from fertilizer use;Leaching from septic tanks,sewage;Erosion of natural deposits
2022	Selenium	10	7.4 – 7.4	50	50	ppb	Discharge from petroleum and metal refineries;Erosion of natural deposits; Discharge from mines.
2022	Cyanide	30	30-30	200	200	ppb	Discharge from plastic and fertilizer factories Discharge from steel/metal factories

		AVERAGE LEVEL	MINIMUM LEVEL	MAXIMUM LEVEL	MCLG	MCL	UNIT OF MEASURE	SOURCE OF CONTAMINANT
2022	Fluoride	0.7	0.7	0.7	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2022	Nitrate	.95	.95	.95	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

RADIOACTIVE CONTAMINANTS

COLLECTION DATE	CONTAMINANT	HIGHLEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MCLG	MCL	UNIT OF MEASURE	SOURCE OF CONTAMINENT
02/21/2014	Combined Radium 226/228	0.91	0.91– 0.91	0	5	pCi/L	Erosion of natural deposits.
05/26/2020	Beta/photon emitters	6.0	6.0 – 6.0	0	50	pCi/L*	Decay of natural and man-made deposits
*EPA considers 50 pCi/L to be the level of concern for beta particles							
05/26/2020	Uranium	4.7	4.7 – 4.7	0	30	ug/l	Erosion of natural deposits

Violations

Lead and Copper Rule

The 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 containing plumbing materials.

Violation Type	Violation Begin	Violation End	Violation Explanation
FOLLOW-UP OR ROUTINE TAP M/R(LCR)	10/01/2022	2022	WE COLLECTED SAMPLES ON TIME, HOWEVER THEY WERE NOT REPORTED TO TCEQ BY THE DEADLINE.
LEAD CONSUMER NOTICE(LCR)	12/30/2022	2022	WE FAILED TO PROVIDE THE RESULTS OF LEAD WATER MONITORING TO THE CONSUMERS AT THE LOCATIONS TESTED. THESE WERE SUPPOSED TO BE PROVIDED NO LATER THAN 30 DAYS AFTER THE RESULTS

IN THE WATER LOSS AUDIT SUBMITTED TO TEXAS WATER DEVELOPMENT BOARD FOR THE TIME PERIOD OF JANUARY 2022 OUR SYSTEM LOST AN ESTIMATED TOTAL OF 137 GALLONS PER CAPITA PER DAY (GPCD) OF WATER.

A SOURCE WATER ASSESSMENT FOR YOUR DRINKING WATER SOURCE(S) IS CURRENTLY BEING CONDUCTED BY THE TCEQ AND SHOULD BE PROVIDED TO US THIS YEAR. THE REPORT WILL DESCRIBE THE SUSCEPTIBILITY AND TYPES OF CONSTITUENTS THAT MAY COME INTO CONTACT WITH YOUR DRINKING WATER SOURCE BASED ON HUMAN ACTIVITIES AND NATURAL CONDITIONS. THE INFORMATION IN THIS ASSESSMENT WILL ALLOW US TO FOCUS ON OUR SOURCE WATER PROTECTION STRATEGIES.