Nueces Water Supply Corporation
2023 Consumer Confidence Report

This is your water quality report for January 1 to December 31, 2023

PWS ID Number: TX1780052

Our Drinking Water is Regulated

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. For more information regarding this report contact John Marez at (361) 592-1720.

Information about your Drinking Water

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.

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 (800) 426-4791.

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 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, and 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.

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.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the NWSC business office at (361) 592-1720.

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 immunocompromised persons such as those undergoing chemotherapy for cancer; persons 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 providers. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (800) 426-4791.

Nueces WSC is a purchased surface water system. Where do we get our drinking water?

Our drinking water is obtained from surface water sources. Nueces Water Supply Corporation is supplied by South Texas Water Authority, who purchases treated water from the City of Corpus Christi whose surface water sources are Lake Corpus Christi, Lake Texana, Choke Canyon Reservoir and Colorado River. The City of Corpus Christi's water quality data is also included in this report.

Source Water Assessments

TCEQ completed a Source Water Susceptibility for all drinking water systems that own their sources.

This report describes the susceptibility and types of constituents that may come into contact with the drinking water source based on human activities and natural conditions. The system from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system, contact John Marez at (361) 592-1720.

Water Loss: In the most recent Water Loss Audit submitted to the Texas Water Development Board for the period of January to December 2020, NWSC lost an estimated 19.6 million gallons of water.

Definitions & Abbreviations

Action Level (AL) – 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 a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Avg – Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Level 1 Assessment – 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 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.

Maximum Contaminant Level (MCL) – 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 (MCLG) – 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 (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 contaminants.

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

mrem – millirems per year (a measure of radiation absorbed by the body)

na – not applicable

NTU – nephelometric turbidity units (a measure of turbidity)

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

ppb – parts per billion, or micrograms per liter (μg/L) – or one ounce in 7,350,000 gallons of water.

ppm – parts per million, or milligrams per liter (mg/L) – or one ounce in 7,350 gallons of water.

ppq – parts per quadrillion, or picograms per liter (pg/L)

ppt – parts per trillion, or nanograms per liter (ng/L)

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

Nueces Water Supply Corporation 2023 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2023	20	10.1 – 30.1	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	49	35.5 – 72.5	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results and TTHM sample results collected at a location over a year.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate (measured as Nitrogen)	2023	1	0.18 – 0.73	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation	Source in Drinking Water
Chloramine	2023	2.39	0.51 – 3.81	4	4	ppm	N	Water additive used to control microbes.

NWSC – Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	2	1	0	N	Naturally present in the environment.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct one Level 1 assessment. One Level 1 assessment was completed. In addition, we were required to take one corrective action and we completed this actions.

NWSC – Lead and Copper

Year	Lead & Copper	MCLG	Action Level (AL)	The 90th Percentile	# of Sites Over AL	Unit	Violation	Likely Source of Contamination
2021	Copper	1.3	1.3	0.079	0	ppm	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2021	Lead*	0	15	1.8	0	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits.

*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. We are responsible for providing high quality drinking water, but we 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.

City of Corpus Christi 2023 Water Quality Test Results

City of Corpus Christi – Organic Contaminants

Constituent	Year	Highest Annual Running Average	Range	MCL	MCLG	Unit of Measure	Likely Source of Contaminant
Atrazine	2023	0.13	na	3	3	ppb	Runoff from herbicide used on row crops.

City of Corpus Christi – Cryptosporidium Monitoring

Constituent	Year	Highest Average	MCLG	Unit of Measure	Likely Source of Contaminant
Cryptosporidium	2019	0.01	0	Total (Oo) cysts/L	Human and animal fecal waste.

Cryptosporidium is of great concern in public water systems that treat surface water for drinking water sources. Resistant to disinfectants, Cryptosporidium can cause gastrointestinal illness in individuals who consume contaminated water. The Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) is required by Congress in order to increase protection from microbial contaminants such as Cryptosporidium. Under this rule, water systems must conduct monthly source water Cryptosporidium sampling over a two-year span. The City of Corpus Christi completed sampling in July 2019.

City of Corpus Christi – Inorganic Contaminants

Constituent	Year	Highest Single Measurement	Range	MCL (AL)	MCLG	Unit of Measure	Likely Source of Contaminant
Barium	2023	0.118	na	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries, erosion of natural deposits.
Chlorite	2023	0.79	0.27 – 0.79	1	0.80	ppm	By-product of drinking water disinfection.
Copper	2023	0.0105	na	(1.3)	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits.
Fluoride	2023	0.34	na	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate	2023	1.24	na	10	10	ppm	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits.

Constituent	Year	Highest Single Measurement	Range	MRDL	MRDLG	Unit of Measure	Likely Source of Contaminant
Chlorine Dioxide	2023	90	0 – 90	800	800	ppb	Water additive used to control microbes.

Constituent	Year	Highest Annual Running Average	Range	MCL	MCLG	Unit of Measure	Likely Source of Contaminant
Cyanide*	2023	45*	0 – 97.7	200	200	ppb	Discharge from steel/metal factories, discharge from plastic and fertilizer factories.

*Calculated as a running annual average: the average of four consecutive quarterly averages, which typically include a portion of the previous year's results.

City of Corpus Christi – Turbidity

Year/Constituent	Highest Single Measurement	Lowest % of Samples Meeting Limits	Entry Point Limit (TT)	Single Measurement Limit (TT)	Likely Source of Contaminant
2023 Plant 1 (NTU)	0.23	100.0	≤0.3	1.0	Soil runoff.
2023 Plant 2 (NTU)	0.34	100.0	≤0.3	1.0	Soil runoff.

Turbidity 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.

City of Corpus Christi – Radioactive Contaminants

Constituent	Year	Highest Single Measurement	Range	MCL	MCLG	Unit of Measure	Likely Source of Contaminant
Gross Beta Particle Activity	2023	11	na	50	0	pCi/L	Decay of natural and man-made deposits.
Uranium	2023	1	na	30	0	ppb	Erosion of natural deposits.

City of Corpus Christi 2023 Water Quality Test Results – Continued

City of Corpus Christi – Secondary and Other Constituents Not Associated with Adverse Health Effects

Constituent	Year	Highest Average	Range	MCL	Unit of Measure	Likely Source of Contaminant
Aluminum	2023	0.167	na	0.2	ppm	Abundant naturally occurring element.
Bicarbonate	2023	179	na	na	ppm	Corrosion of carbonate rocks such as limestone.
Calcium	2023	67	65.6 – 69.0	na	ppm	Abundant naturally occurring element.
Chloride	2023	135	117 – 153	300	ppm	Abundant naturally occurring element; used in water purification.
Hardness as CaCO3	2023	213	208 – 217	na	ppm	Naturally occurring calcium and magnesium.
Magnesium	2023	12.9	na	na	ppm	Abundant naturally occurring element.
Manganese	2023	6	1.3 – 11	50	ppb	Naturally occurring element.
Nickel	2023	2.1	na	na	ppb	Erosion of natural deposits.
Potassium	2023	9.49	na	na	ppm	Abundant naturally occurring element.
Sodium	2023	91	73 – 108	na	ppm	Erosion of natural deposits; oil field by-product.
Sulfate	2023	80	66 – 93	300	ppm	Naturally occurring; oil field by-product.
Total Alkalinity	2023	129	110 – 147	na	ppm	Naturally occurring soluble mineral salts.
Total Dissolved Solids	2023	490	386 – 593	1000	ppm	Total dissolved mineral constituents in water.

Many constituents found in drinking water can cause taste, color and odor problems. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document, but they may affect the appearance and taste of your water.

Nueces Water Supply Corporation

2023 Drinking Water Quality Report

Public Participation Opportunity

Date:	**Monday through Friday**
Time:	**8:00 a.m. – 5:00 p.m.**
Location:	**South Texas Water Authority's Office, 2302 E. Sage Rd., Kingsville, Texas**
Phone No:	**(361) 592-1720**

En Español

Este reporte incluye información importante sobre el agua para tomar. Para asistencía en español, favor de llamar al telefono (361) 592-1720.