2024 Annual Drinking Water Quality Report
(Consumer Confidence Report)
PWS ID # 1080007 **CITY OF MERCEDES** Phone # 956-565-2372

SPECIAL NOTICE

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/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 (800-426-4791).

Public Participation Opportunities The public is encouraged to attend the City Commission meetings which are held on the first and third Thursday of each month at the Mercedes City Hall located at 400 S. Ohio Ave.

For any questions regarding your drinking water or any of the information provided in the following pages please call the Mercedes Water Treatment Plant at (956) 565-2372.

Our Drinking Water Currently Meets or Exceeds All Federal (EPA) Drinking Water Requirements This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

CCR is available at (https://cityofmercedes.com/water-department/)

INFORMATION ON SOURCES OF 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.

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.

En Español Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (956) 565 - 2372 - para hablar con una persona bilingüe en español.

Where do we get our drinking water? Our drinking water is obtained from a combination of surface water that originates from the Rio Grande River and groundwater. A Source Water Susceptibility Assessment for your drinking water sources(s) is currently being updated by the Texas Commission on Environmental Quality. This information 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 information contained in the assessment allows us to focus on our source water protection strategies. Source water assessment information is available on Texas Drinking Water Watch at (**https://dww2.tceq.texas.gov/DWW/**) under City of Mercedes. For more information on source water assessments and protection efforts at our system, please contact us at (956) 565-2372. **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 some small amounts of 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).

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 (TCEQ), not the EPA. These constituents pose no health concerns and are only included in this report if the secondary MCL is exceeded. **About the following pages:** The Table of Detected Contaminants lists all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 90 contaminants.

DEFINITIONS: **Maximum Contaminant Level (MCL) -** The highest permissible level of contaminants 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. **MPL –** State Assigned Maximum Permissible Level. **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 contaminants in drinking water. **Action Level (AL) -** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. **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.

ABBREVIATIONS: **LRAA** – Locational Running Annual Average. **MPL** – Maximum Permissible Level. **NTU -** Nephelometric Turbidity Units. **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 (µg/L). **mfl** – million fibers per liter. **NA** – not applicable. **ND** – not detected. **RAA** –Running Annual Average. **MRL** – Minimum Reporting Limit

TABLE OF DETECTED CONTAMINANTS
Inorganic Contaminants

Sample Date	Contaminants	MCLG	MCL	Your Water	Range		Unit of Measure	Violation	Typical Source of Contaminant
					Low	High			
2024	Arsenic	NA	0.01	0.0030	NA		ppm	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
2021	Asbestos	NA	7.0	0.1970	NA		mfl	No	Erosion of natural deposits; Household waste; Runoff from mining tailings

2024	Barium	NA	2.0	0.0643	NA		ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2023	Lithium Total	NA	9.0	56.0*	49.6	61.4	ppb	No	Occurs naturally in igneous rocks and found in the surface and underground waters. Currently not regulated by the EPA. *Yearly Average.
2024	Mercury	NA	0.002	<0.0004	NA		ppm	No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland.
2024	Nitrate [measured as Nitrogen]	NA	10.0	0.4100	NA		ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
2024	Selenium	NA	0.05	0.0046	NA		ppm	No	Discharge of petroleum and metal refineries; erosion of natural deposits; discharge from mines.
2023	PFHxA	NA	3.5	0.0033	MRL	0.0033	ppb	No	Perfluorohexanoic Acid (PFHxA) is the breakdown of other PFAS that are used in stain-resistant fabrics, paper food packaging, carpets, and manufacturing photographic film. Currently not regulated by the EPA.
2024	Thallium Total	NA	0.002	<0.0004	NA		ppm	No	Leaching from petroleum and metal refineries; Erosion of natural deposits; Discharge from factories.
2024	Total Cyanide	NA	0.2	0.09	NA		ppm	No	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2023	Yttrium Total	NA	NA	125.4*	123.6	127.1	ppb	No	Occurs naturally found in combination with lanthanide elements in rare-earth minerals. Currently not regulated by the EPA. *Yearly Average

Disinfectant Residual Level

Year	Disinfectant	MRDLG	MRDL	Your Water RAA	Range of Individual Sample		Unit of Measure	Violation	Typical Source
					Low	High			
2024	Chloramines	4.0	4.0	2.04	0.50	4.70	ppm	No	Disinfectant used to control microbes.
Health information for Chloramine (as Chlorine). Some people who use water containing chloramines well above the MRDL could experience irritating effects on their eyes and nose. Some people who drink water containing chloramines well above the MRDL could experience stomach discomfort or anemia.									

Disinfection Byproducts – Stage 2

Year	Contaminant	MCLG	MCL	Your Water LRAA*	Range of Individual Sample		Unit of Measure	Violation	Typical Source
					Low	High			
2024	Total Trihalomethanes (TTHM's)	NA	80.0	44.8	29.6	57.6	ppb	No	Byproduct of drinking water disinfection.
2024	Total Haloacetic Acids (HAA5's)	NA	60.0	17.3	10.6	23.3	ppb	No	Byproduct of drinking water disinfection.
Health information for TTHMs (Total Trihalomethanes) - Some people who drink water containing trihalomethanes above the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.									
* For Stage 2 TTHM's or Haloacetic Acids the level detected is the highest locational running annual average (LRAA). The locational running average is the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.									

Lead and Copper

Year	Contaminant	MCLG	AL	Your Water 90th Percentile	# Samples Exceeding AL	Unit of Measure	Exceeds AL	Typical Source
2022	Lead – action level at consumer taps	0	15.0	3.2	0	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits.
2022	Copper – action level at consumer taps	1.3	1.3	.45	2	ppm	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

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 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.

Turbidity

Year	Contaminant	Limit (Treatment Technique)	Level detected	Violation	Source of Contaminant
2024	Highest single measurement (NTU's)	1.0	**0.422**	No	Soil runoff
2024	Lowest monthly % meeting limit	0.3	**98.5%***	No	Soil runoff
***98.5%** was the lowest monthly % of samples below the TT value of 0.3. A value less than 95% constitutes a TT violation. The highest single measurement was **0.422**. Any measurement in excess of 1.0 NTU's is a violation unless otherwise approved by the state.					

Turbidity has no health effects but may 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.

Radioactive Contaminants

Year	Contaminant	MC LG	MCL	Your Water	Range Low	Range High	Unit of Measure	Violation	Typical Source
2023	Gross Alpha/photon emitters	0	15.0	3.3	NA		pCi/L	No	Decay or breakdown of natural deposits.
2023	Gross Beta/photon emitters	0	50.0*	7.5	NA		pCi/L	No	Decay or breakdown of natural deposits.
2023	Radium - 288	0	5.0	1.5	NA		pCi/L	No	Decay or breakdown of natural deposits.
2023	Uranium	0	30.0	0.004	NA		ppb	No	Decay or breakdown of natural deposits.

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

Total Organic Carbon (TOC)

Year	Contaminant	Average TOC removal ratio %	Lowest TOC removal ratio %	Highest TOC removal ratio %	Treatment Technique (TT)	MC LG	Unit of Measure	Source of Contaminant
2024	TOC Removal	2.55	1.87	2.94	TT -System provides the alternative compliance criteria removal ratio required	NA	%*	Naturally present in the environment.

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

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 (THM's) and haloacetic acids (HAA's) which are reported elsewhere in this report.

Microbiological Contaminants

Year	Contaminant	MC LG	MCL	Yearly Positives	Violation	Typical Source
2024	Total Coliform Bacteria	0	TT	0	No	Naturally present in the environment.
2024	E. coli	0	Routine and repeat samples are total coliform-positive, and either is E. coli-positive, or system fails to take repeat samples following E. coli-positive routine sample or system fails to analyze total coliform-positive repeat sample for E. coli.	0	No	Human and animal fecal waste.

No bacteriological samples in 2023 were found to be positive for Total Coliform Bacteria or E.coli.

Microbiological Monitoring

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.

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

Year	Constituent	Your Water	Minimum Level	Maximum Level	Secondary Limit MPL	Unit of Measure	Source of Constituent
2024	Aluminum	0.0202	NA	NA	0.05-0.2	ppm	Erosion of natural deposits; residue from some surface water treatment processes
2024	Bicarbonate	178.0	NA	NA	NA	ppm	Corrosion of carbonate rocks such as limestone.
2024	Calcium	74.7	NA	NA	100	ppm	Naturally present in the environment.
2024	Chloride	280.0	NA	NA	300.0	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2024	Copper	0.0048	NA	NA	1.0	ppm	Corrosion of household plumbing systems; Erosion of natural deposits.
2024	Fluoride	.7900	NA	NA	2.0	ppm	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2024	Iron	0.0110	NA	NA	0.3	ppm	Naturally occurrence from soil leaching.
2024	Magnesium	30.2	NA	NA	NA	ppm	Naturally present in the environment.
2024	Manganese	0.0206	NA	NA	0.05	ppm	Leaching from natural deposits.
2024	Nickel	0.0024	NA	NA	0.1	ppm	Erosion of natural deposits; discharge from metal factories.
2024	pH	7.7	NA	NA	>7.0	units	Measure of corrosively of water.
2024	Potassium	6.32	NA	NA	NA	ppm	Naturally present in the environment.
2024	Sodium	279.0	NA	NA	NA	ppm	Leaching from natural deposits
2024	Sulfate	406.0	NA	NA	300.0	ppm	Runoff/leaching from natural deposits; industrial wastes.
2024	Total Alkalinity as CaCO3	146.0	NA	NA	NA	ppm	Naturally occurring soluble mineral salts.
2024	Total Hardness as CaCO3	311.0	NA	NA	NA	ppm	Naturally occurring soluble mineral salts.
2024	Total Dissolved Solids	1220.0	NA	NA	1000.0	ppm	Total dissolved mineral constituents in water.