



2021 CONSUMER CONFIDENCE REPORT FOR PUBLIC WATER SYSTEM: CITY OF ROSENBERG

ID: TX0790003

for the period of January 1 to December 31, 2021

Rosenberg

TEXAS



Eddie De Leon

Heriberto "Eddie" De Leon, CPM, CWP
Utilities Director | City of Rosenberg

On behalf of the City of Rosenberg Utilities Department, I present the 2021 Water Quality Report. A Water Quality Report, also known as a Consumer Confidence Report (CCR), is an annual report that presents the quality of a city's drinking water. CCRs are required by the Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ).

The report summarizes data collected on the City's drinking water during a calendar year. Water samples are routinely collected and analyzed for chemical, bacteriological and disinfectant residual contaminants. The samples are collected from various locations throughout the water production and distribution system by water professionals certified in proper sample collection. This report also documents any monitoring or testing violations.

The City of Rosenberg's Utilities Department takes pride in being your water service provider and our commitment is to provide you with clean, safe drinking water. Please review the report, and if you have any questions or concerns, do not hesitate to reach out to us. We can be reached by calling 832-595-3400 or via email at hdeleon@rosenbergtx.gov.

HEALTH INFORMATION FOR SPECIAL POPULATIONS

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 EPA's Safe Drinking Water Hotline (800-426-4791).

HEALTH EFFECTS OF 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. 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>.





2021 CONSUMER CONFIDENCE REPORT

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.

WATER SYSTEM INFORMATION:

The City of Rosenberg Utilities Department is responsible for the production, treatment and distribution of drinking water in the City of Rosenberg. The department is located at 2630 Ave. A, Rosenberg, and citizens may contact Heriberto “Eddie” De Leon, Utilities Director, at (832) 595-3400, for more information regarding this report.

EN ESPAÑOL:

Este reporte incluye información importante sobre el agua potable. Para asistencia en español, favor de llamar al telefono (832) 595-3301 para hablar con una persona en español.

PUBLIC PARTICIPATION OPPORTUNITIES:

To participate in public discussions regarding the City’s water quality, please call (832) 595-3340 for a list of upcoming City Council meetings, or visit the City’s website at www.rosenbergtx.gov. To learn more about future public meetings concerning your drinking water, please contact us.

WHERE DO WE GET OUR DRINKING WATER?

The source of drinking water used by the City of Rosenberg is ground water from the Evangeline and Chicot aquifers and surface water purchased from the Brazosport Water Authority from the Brazos River located in Brazoria County.

INFORMATION ON SOURCES OF 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline at (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 & 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.

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 City of Rosenberg Utilities Department at (832) 595-3400. In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

INFORMATION ABOUT SECONDARY CONTAMINANTS:

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 the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water. 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.

INFORMATION ABOUT SOURCE WATER ASSESSMENTS:

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Heriberto “Eddie” De Leon, Utilities Director, at (832) 595-3400.

For more information about our sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <http://www.tceq.texas.gov/gis/swaview>. Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: dww2.tceq.texas.gov/DWW/

Source Water Name	Location	Type of Water	Report Status
Water Plant #2 (Well #5)	1415 Alamo St	Groundwater	Active
Water Plant #3 (Well #6)	1024 Grunwald Heights Blvd	Groundwater	Active
Water Plant #4 (Well #7)	3720 Airport Ave	Groundwater	Active
Water Plant #5 (Well #8 & Well #10)	401 Cottonwood Church Rd	Groundwater	Active
Water Plant #6 (Well #9)	7075 Reading Rd	Groundwater	Active
Water Plant #8	7824 A Meyer Rd	Surface water	Active

DEFINITIONS AND ABBREVIATIONS:

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.

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

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

Level 1 Assessment: Study of the water system to identify potential problems and determine (if possible) why 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 or 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 or 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 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.

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.

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: micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water.

ppm: milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.

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

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

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



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	5% of monthly samples are positive	0		0	NO	Naturally present in the environment

LEAD & COPPER

Lead & Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# of Sites Over AL	Units of Measure	Violation	Likely Source of Contamination
Copper	4/28/2020	1.3	1.3	0.18	0	ppm	NO	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	4/28/2020	0	15	2.8	0	ppb	NO	Corrosion of household plumbing systems; erosion of natural deposits.

2021 WATER QUALITY TEST RESULTS City of Rosenberg = White | Brazosport Water Authority = Grey

DISINFECTANT RESIDUAL TABLE

Disinfectant	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation	Likely Source of Contamination
Chlorine Residual Free	2021	2.58	0.50-4.30	4	4	ppm	NO	Water additive used to control microbes.

REGULATED CONTAMINANTS

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contamination
Total Trihalomethanes (TTHM)*	2021	10	0-29.8	No goal for the total	80	ppb	NO	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)*	2021	19	0-19.2	No goal for the total	60	ppb	NO	By-product of drinking water disinfection.
Chlorite	2021	0.728	0.095-0.728	0.8	1	ppm	NO	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)*	2021	36	35.8-35.8	No goal for the total	60	ppb	NO	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)*	2021	26	25.9-25.9	No goal for the total	80	ppb	NO	By-product of drinking water disinfection.

*Total Organic Carbon (TOC) has no health effects. However, TOC provides a medium for the formation of disinfection by-products. These by-products include trihalomethanes (THMs) and haloacetic acids (HAA5). Drinking water containing these by-products in excess of the maximum contaminant level (MCL) may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of cancer. The value in the Highest Level or Average Detected column is the highest average of all TTHM/HAA5 sample results collected at a location over a year.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units of Measure	Violation	Likely Source of Contamination
Arsenic	2021	2.4	2.4-2.4	0	10	ppb	NO	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium	2021	0.197	0.197-0.197	2	2	ppm	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	2021	0.31	0.31-0.31	4	4.0	ppm	NO	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2021	0.49	0-0.49	10	10	ppm	NO	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units of Measure	Violation	Likely Source of Contamination
Barium	2021	0.107	0.107-0.107	2	2	ppm	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Cyanide	2021	30	30-30	200	200	ppb	NO	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Fluoride	2021	0.2	0.16-0.16	4	4.0	ppm	NO	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2021	0.28	0.28-0.28	10	10	ppm	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individuals Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/Photon Emitters	2021	4	4-4	0	50	pCi/L*	NO	Decay of natural and man-made deposits.
Combined Radium 226/228	5/31/2017	1.5	1.5-1.5	0	5	pCi/L	NO	Erosion of natural deposits.
Uranium	2021	0.001	0-0.001	0	0.03	mg/L	NO	Erosion of natural deposits.
Beta/photon emitters	2021	4.3	4.3-4.3	0	50	pCi/L*	NO	Decay of natural and man-made deposits.
Combined Radium 226/228	2015	1.5	1.5-1.5	0	5	pCi/L	NO	Erosion of natural deposits.

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

SECONDARY AND OTHER CONSTITUENTS NOT REGULATED (NO ASSOCIATED ADVERSE HEALTH EFFECTS)

Year	Constituent	Recent Maximum Level, mg/L	Secondary Limit	Source of Constituent
2021	Aluminum	0.02	0.05	Abundant, naturally occurring element.
2021	Bicarbonate	235	NA	Corrosion of carbonate rocks such as limestone.
2021	Calcium	28.1	NA	Abundant, naturally occurring element.
2021	Chloride	38	300	Abundant, naturally occurring element; used in water purification; byproduct of oil field activity.
2021	Iron	0.274	0.3	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2021	Magnesium	5.6	NA	Abundant, naturally occurring element.
2021	Manganese	0.0112	0.05	Abundant, naturally occurring element.
2021	pH	8.3	>7.0	Measure of corrosivity of water.
2021	Sodium	76.4	NA	Erosion of natural deposits; byproduct of oil field activity.
2021	Sulfate	13.0	300	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2021	Total Alkalinity as CaCO ₃	192	NA	Natural occurring soluble mineral salts.

Year	Constituent	Recent Maximum Level, mg/L	Secondary Limit	Source of Constituent
2021	Total Dissolved Solids	270	1000	Total dissolved mineral constituents in water.
2021	Total Hardness as CaCO ₃	93.2	NA	Naturally occurring calcium.
2021	Zinc	0.005	5	Moderately abundant, naturally occurring element; used in metal industry.

Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2021	0.1	0.1-0.1	3	3	ppb	NO	Runoff from herbicide used on row crops.

Turbidity	Level Detected	Limit (Treatment Technique)	Violation	Likely Source of Contamination
Highest Single Measurement	0.24 NTU	1 NTU	NO	Soil Runoff.
Lowest monthly % meeting limit	100%	0.3 NTU	NO	Soil Runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Total Organic Carbon: 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 section.

In the water loss audit submitted to the Texas Water Development Board for the time period of January 1 – December 31, 2021, our system lost an estimated 299,461,417 gal of water. If you have any questions about the water loss audit please call (832) 595-3400.

