



CITY OF *Rosenberg*

ANNUAL WATER QUALITY REPORT

for the period of January 1 to December 31, 2016

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 2110 4th Street, Rosenberg, and citizens may contact Evan Kirkpatrick, Director of Utilities, at 832-595-3582, for more information regarding this report

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

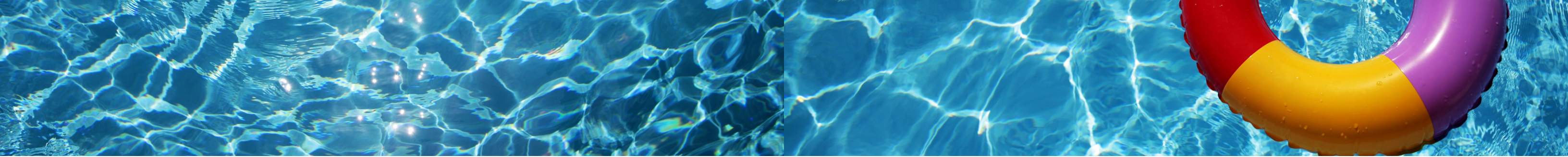
WHERE DO WE GET OUR DRINKING WATER? The source of drinking water used by the City of Rosenberg is ground water from the Evangeline and Chicot aquifers.

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.

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 (800-426-4791).

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>.



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 EPA's 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 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.

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) 595-3582.

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, secondary's, 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 Evan Kirkpatrick at 832-595-3582.

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](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: [HTTP://DWW2.TCEQ.TEXAS.GOV/DWW/](http://dww2.tceq.texas.gov/dww/)

Source Water Name	Location	Type of Water	Report Status
10 - 401 Cottonwood Church	401 Cottonwood Church	GW	
4 - 2118 Avenue G / Plant 1	2118 Avenue G / Plant 1	GW	Y
5A - 1415 Alamo / Plant 2	1415 Alamo / Plant 2	GW	Y
6 - 1024 Grunwald / Plant 3	1024 Grunwald / Plant 3	GW	Y
7 - 3720 Airport / Plant 4	3720 Airport Ave / Plant 4	GW	
8 - 401 Cottonwood Church Rd	401 Cottonwood Church	GW	Y
9 - 7075 Reading Rd	7075 Reading Rd	GW	Y

**2016 REGULATED CONTAMINANTS DETECTED
COLIFORM BACTERIA**

Total Coliform Maximum Contaminant Level	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	Violations	Likely Source of Contamination
0	5% of monthly samples are positive	2.3		0	N	Naturally present in the environment

LEAD AND COPPER DEFINITIONS

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.

LEAD AND COPPER	DATE SAMPLED	MCLG	ACTION LEVEL (AL)	90TH PERCENTILE	# SITES OVER AL	UNITS	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Copper	2016	1.3	1.3	0.19	0	ppm	N	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	2016	0	15	1.6	0	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits.

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

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 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

DISINFECTANT RESIDUAL TABLE

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation	Likely Source of Contamination
Chlorine Residual Free	2016	1.40	0.41	2.19	4	4	ppm	N	Water additive used to control microbes.

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)

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)

REGULATED CONTAMINANTS

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contamination
Total Trihalomethanes (TTHm)*	2016	1.0	0 – 1.3	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

**Total Organic carbon (TOC) has no health affects. However, TOC provides a medium for the formation of disinfection by-products. These by products include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water contains 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.*

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2015	3.9	3.9 – 3.9	0	10	ppb	N	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium	2015	0.197	0.197 – 0.197	2	2	ppm	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	2015	0.36	0.36 – 0.36	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.A
Selenium	2015	3.3	3.3 – 3.3	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2015	1.5	1.5 – 1.5	0	5	pCi/L	N	Erosion of natural deposits.

Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Di (2-ethylhexyl) phthalate	2016	0.60	0 – 0.60	0	6	ppb	N	Discharge from rubber and chemical factories

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

Year	Constituent	Recent Maximum Level mg/L	Secondary Limit	Source of Constituent
2014	Aluminum	0.155	0.05	Abundant naturally occurring element.
2014	Bicarbonate	238	NA	Corrosion of carbonate rocks such as limestone.
2014	Calcium	46.1	NA	Abundant naturally occurring element.
2014	Chloride	144	300	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2014	Copper	0.0049	1	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2015	Iron	0.417	0.3	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2014	Lead	0.0019	NA	Corrosion of household plumbing systems; erosion of natural deposits.
2014	Magnesium	8.46	NA	Abundant naturally occurring element.
2014	Manganese	0.0234	0.05	Abundant naturally occurring element.
2015	pH	8.1	>7.0	Measure of corrosivity of water.
2014	Sodium	132	NA	Erosion of natural deposits; byproduct of oil field activity.
2014	Sulfate	13	300	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2014	Total Alkalinity as CaCO3	195	NA	Naturally occurring soluble mineral salts.
2014	Total Dissolved Solids	461	1000	Total dissolved mineral constituents in water.
2014	Total Hardness as CaCO3	150	NA	Naturally occurring calcium.
2015	Zinc	0.0153	5	Moderately abundant naturally occurring element; used in the metal industry.

In the water loss audit submitted to the Texas Water-Development Board for the time period of January 1 – December 31, 2016, our system lost an estimated 30 million gallons of water. If you have any questions about the water loss audit please call (832) 595-3582.