



**2013 Annual Drinking Water Quality Report**  
Consumer Confidence Report (CCR)  
Public Water System ID Number TX0790003  
**CITY OF ROSENBERG**  
**Phone No.: (832) 595-3582**

Annual Water Quality Report for the period of January 1 to December 31, 2013

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.

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.

**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 4<sup>th</sup> Street, Rosenberg, and citizens may contact Karl Zwahr, Utilities Director, 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.ci.rosenberg.tx.us](http://www.ci.rosenberg.tx.us). To learn more about future public meetings concerning your drinking water, please contact us.

**SPECIAL NOTICE - Required language for ALL Community Public Water Systems:** 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; those 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. The City of Rosenberg is 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>.

**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 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 pickup 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.

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 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.

**INFORMATION ABOUT SOURCE WATER ASSESSMENTS:** The TCEQ completed an assessment of the City's source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for the City's 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 of our system, contact TCEQ at 512-239-4691.

For more information about the City's sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=> or 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: <http://dww.tceq.texas.gov/DWW/>

## **WATER QUALITY TEST RESULTS**

**Definitions:** The following tables contain scientific terms and measures, some of which may require explanation.

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

**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 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 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.

**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.

**MFL:** million fibers per liter (a measure of asbestos)

**Mrem/year:** 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 (µg/L) or parts per billion – 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

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

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

## **2013 Regulated Contaminants Detected**

### **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)	90 <sup>th</sup> Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2013	1.3	1.3	0.222	0	ppm	N	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	2013	0	15	1.71	0	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits.

### **Maximum Residual Disinfectant Residual Reporting**

Year	Disinfectant Type	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit	Source
2013	Chlorine Residual Free	1.15	0.27	2.15	4	4	ppm	Disinfectant used to control microbes.

### **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)*	2013	2	0 – 2.8	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic*	1/31/2011	5.4	0 – 5.4	0	10	ppb	N	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.

\*While our drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Barium	1/31/2011	0.361	0.224 – 0.361	2	2	ppm	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
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Fluoride	2/20/2012	0.39	0.39 – 0.39	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	1/31/2011	Levels lower than detect level	0 – 0	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Nitrate Advisory – Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six (6) months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Nitrite (measured as Nitrogen)	4/25/2006	Levels lower than detect level	0 – 0	1	1	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
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Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contamination
Beta/photon emitters	1/31/2011	6.1	0 – 6.1	0	50	pCi/L	N	Decay of natural and man-made deposits.
Combined Radium 226/228	1/31/2011	3.2	1 – 3.2	0	5	pCi/L	N	Erosion of natural deposits.

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

Year	Constituent	Recent Maximum Level mg/L	Secondary Limit	Source of Constituent
2011	Aluminum	20.020	0.05	Abundant naturally occurring element.
2011	Bicarbonate	246	NA	Corrosion of carbonate rocks such as limestone.
2011	Calcium	48.7	NA	Abundant naturally occurring element.
2011	Chloride	133	300	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2011	Copper	0.0112	1	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2011	Iron	0.716	0.3	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2011	Lead	<0.0010>	NA	Corrosion of household plumbing systems; erosion of natural deposits.
2011	Magnesium	8.73	NA	Abundant naturally occurring element.
2011	Manganese	0.0207	0.05	Abundant naturally occurring element.
2011	pH	7.8	>7.0	Measure of corrosivity of water.
2011	Sodium	133	NA	Erosion of natural deposits; byproduct of oil field activity.
2011	Sulfate	13	300	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2011	Total Alkalinity as CaCO3	202	NA	Naturally occurring soluble mineral salts.
2011	Total Dissolved Solids	468	1000	Total dissolved mineral constituents in water.
2011	Total Hardness as CaCO3	158	NA	Naturally occurring calcium.
2011	Zinc	0.114	5	Moderately abundant naturally occurring element; used in the metal industry.

Synthetic Organic Contaminants Including Pesticides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contamination
2, 4, 5-TP (Silvex)	5/12/2011	Levels lower than detect level	0 – 0	50	50	ppb	N	Residue of banned herbicide.
2, 4-D	5/12/2011	Levels lower than detect level	0 – 0	70	70	ppb	N	Runoff from herbicide use on row crops.
Alachlor	2/20/2012	Levels lower than detect level	0 – 0	0	2	ppb	N	Runoff from herbicide use on row crops.
Asbestos	05/19/13	Levels lower than detect level	0 – 0	7	7	MFL	N	Decay of asbestos cement water-mains; erosion of natural deposits
Atrazine	2/20/2012	Levels lower than detect level	0 – 0	3	3	ppb	N	Runoff from herbicide use on row crops.
Benzo(a)pyrene	2/25/2009	Levels lower than detect level	0 – 0	0	200	ppt	N	Leaching from linings of water storage tanks and distribution lines.
Carboburan	5/12/2011	Levels lower than detect level	0 - 0	40	40	ppb	N	Leaching of soil fumigant used on rice and alfalfa.
Chlordane	02/20/12	Levels lower than detect level	0 – 0	0	2	ppb	N	Residue of banned termiticide.
Dalapon	5/12/2011	Levels lower than detect level	0 – 0	200	200	ppb	N	Runoff from herbicide used on rights-of-way.
Di (2-ethylhexyl) adipate	2/25/2009	Levels lower than detect level	0 – 0	400	400	ppb	N	Discharge from chemical factories.
Dibromochloropropane (DBCP)	5/12/2011	Levels lower than detect level	0 – 0	0	0	ppt	N	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.

Synthetic Organic Contaminants Including Pesticides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contamination
Dinoseb	5/12/2011	Levels lower than detect level	0 – 0	7	7	ppb	N	Runoff from herbicide used on soybeans and vegetables.
Endrin	2/20/2012	Levels lower than detect level	0 – 0	2	2	ppb	N	Residue of banned insecticide.
Ethylene dibromide	5/12/2011	Levels lower than detect level	0 – 0	0	50	ppt	N	Discharge from petroleum refineries.
Heptachlor	2/20/2012	Levels lower than detect level	0 – 0	0	400	ppt	N	Residue of banned termiticide.
Heptachlor epoxide	2/20/2012	Levels lower than detect level	0 – 0	0	200	ppt	N	Breakdown of heptachlor.
Hexachlorobenzene	2/25/2009	Levels lower than detect level	0 – 0	0	1	ppb	N	Discharge from metal refineries and agricultural chemical factories.
Hexachlorocyclopentadiene	2/25/2009	Levels lower than detect level	0 – 0	50	50	ppb	N	Discharge from chemical factories.
Lindane	2/25/2009	Levels lower than detect level	0 – 0	200	200	ppt	N	Runoff/leaching from insecticide used on cattle, lumber, gardens.
Methoxychlor	2/20/2012	Levels lower than detect level	0 – 0	40	40	ppb	N	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock.
Oxamyl [Vydate]	5/12/2011	Levels lower than detect level	0 – 0	200	200	ppb	N	Runoff/leaching from insecticide used on apples, potatoes and tomatoes.
Pentachlorophenol	2/20/2012	Levels lower than detect level	0 – 0	0	1	ppb	N	Discharge from wood preserving factories.
Picloram	5/12/2011	Levels lower than detect level	0 – 0	500	500	ppb	N	Herbicide runoff.
Simazine	2/20/2012	Levels lower than detect level	0 – 0	4	4	ppb	N	Herbicide runoff.
Toxaphene	2/20/2012	Levels lower than detect level	0 – 0	0	3	ppb	N	Runoff/leaching from insecticide used on cotton and cattle.

Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contamination
1,1,1-Trichloroethane	1/31/2011	Levels lower than detect level	0 – 0	200	200	ppb	N	Discharge from metal degreasing sites and other factories.
1,1,2-Trichloroethane	1/31/2011	Levels lower than detect level	0 – 0	3	5	ppb	N	Discharge from industrial chemical factories.
1, 1-Dichloroethylene	1/31/2011	Levels lower than detect level	0 – 0	7	7	ppb	N	Discharge from industrial chemical factories.
1, 2, 4-Trichlorobenzene	1/31/2011	Levels lower than detect level	0 – 0	70	70	ppb	N	Discharge from textile-finishing factories.
1, 2-Dichloroethane	1/31/2011	Levels lower than detect level	0 – 0	0	5	ppb	N	Discharge from industrial chemical factories.
1, 2-Dichloropropane	1/31/2011	Levels lower than detect level	0 – 0	0	5	ppb	N	Discharge from industrial chemical factories.
Benzene	1/31/2011	Levels lower than detect level	0 – 0	0	5	ppb	N	Discharge from factories; leaching from gas storage tanks and landfills.
Carbon Tetrachloride	1/31/2011	Levels lower than detect level	0 – 0	0	5	ppb	N	Discharge from chemical plants and other industrial activities.
Chlorobenzene	1/31/2011	Levels lower than detect level	0 – 0	100	100	ppb	N	Discharge from chemical and agricultural chemical factories.
Dichloromethane	1/31/2011	Levels lower than detect level	0 – 0	0	5	ppb	N	Discharge from pharmaceutical and chemical factories.
Ethylbenzene	1/31/2011	Levels lower than detect level	0 – 0	700	700	ppb	N	Discharge from petroleum refineries.
Styrene	1/31/2011	Levels lower than detect level	0 – 0	100	100	ppb	N	Discharge from rubber and plastic factories; leaching from landfills.
Tetrachloroethylene	1/31/2011	Levels lower than detect level	0 – 0	0	5	ppb	N	Discharge from factories and dry cleaners.
Toluene	1/31/2011	Levels lower than detect level	0 – 0	1	1	ppm	N	Discharge from petroleum factories.
Trichloroethylene	1/31/2011	Levels lower than detect level	0 – 0	0	5	ppb	N	Discharge from metal degreasing sites and other factories.
Vinyl Chloride	1/31/2011	Levels lower than detect level	0 – 0	0	2	ppb	N	Leaching from PVC piping; discharge from plastics factories.
Xylenes	1/31/2011	Levels lower than detect level	0 – 0	10	10	ppm	N	Discharge from petroleum factories; discharge from chemical factories.
cis-1, 2-Dichloroethylene	1/31/2011	Levels lower than detect level	0 – 0	70	70	ppb	N	Discharge from industrial chemical factories.
o-Dichlorobenzene	1/31/2011	Levels lower than detect level	0 – 0	600	600	ppb	N	Discharge from industrial chemical factories.
p-Dichlorobenzene	1/31/2011	Levels lower than detect level	0 – 0	75	75	ppb	N	Discharge from industrial chemical factories.
trans-1, 2-Dichloroethylene	1/31/2011	Levels lower than detect level	0 – 0	100	100	ppb	N	Discharge from industrial chemical factories.

In the water loss audit submitted to the Texas Water-Development Board for the time period of January 1 – December 31, 2013, our system lost an estimated 44.11 million gallons of water. If you have any questions about the water loss audit please call (832) 595-3582.