

2010 Annual Drinking Water Quality Report

(Consumer Confidence Report)

CITY OF ROCKWALL

Phone Number: 9772-771-7746

SPECIAL NOTICE

Required language for ALL community public water supplies:

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 provider. 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.

Public Participation Opportunities

Date: First and Third Monday

Time: 6:00 PM

Location: Rockwall City Hall

Phone Number: 972-771-7746

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.

Our Drinking Water 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.

WATER SOURCES: 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 before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

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. (972)771-7700- para hablar con una persona bilingüe en español.

Where do we get our drinking water?

Our drinking water is obtained from SURFACE water sources. It comes from the following Reservoirs: Lavon, Texoma, and Cooper. A Source Water Susceptibility Assessment for your drinking water source(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 our source water protection strategies. Some of this source water assessment information will be available later this year on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/> . For more information on source water assessments and protection efforts at our system, please contact us.

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 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 (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, 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.

About The Following Pages

The pages that follow list 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 97 contaminants.

DEFINITIONS

Maximum Contaminant Level (MCL)

The highest permissible level of a contaminant 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.

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 a contaminant 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.

ABBREVIATIONS

NTU - Nephelometric Turbidity Units

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

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)

ppt - parts per trillion, or nanograms per liter

ppq - parts per quadrillion, or picograms per liter

INORGANIC CONTAMINANTS

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2010	Barium	0.04	0.03	0.08	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2010	Fluoride	0.58	0.51	0.64	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2010	Nitrate	0.26	< 0.07	0.51	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2010	Gross beta emitters	N/A	N/A	4.4	50	0	pCi/L	Decay of natural and man-made deposits.

ORGANIC CONTAMINANTS

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2010	Atrazine	< 0.1	< 0.1	0.24	3	3	ppb	Runoff from herbicide used on row crops.
2010	Simazine	< 0.07	< 0.07	0.08	4	4	ppb	Runoff from herbicide used on row crops.

MAXIMUM RESIDUAL DISINFECTANT LEVEL

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2010	Chlorine Residual (Chloramines)	2.08	1.2	2.2	4.0	<4.0	ppm	Disinfectant used to control microbes.
2010	Chlorine Dioxide	0	0	0	0.8	0.8	ppm	Disinfectant.
2010	Chlorite	0.33	0.01	0.75	1.0	N/A	ppm	Disinfectant.

DISINFECTION BYPRODUCTS

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2010	Total Haloacetic Acids	27	16.3	33.4	60	ppb	Byproduct of drinking water disinfection.
2010	Total Trihalomethanes	42	29	47.9	80	ppb	Byproduct of drinking water disinfection.

UNREGULATED CONTAMINANTS

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2010	Chloroform	17.83	11.5	25.6	ppb	Byproduct of drinking water disinfection.
2010	Bromoform	<1.0	<1.0	1.1	ppb	Byproduct of drinking water disinfection.
2010	Bromodichloromethane	14.3	11.5	16.8	ppb	Byproduct of drinking water disinfection.
2010	Dibromochloromethane	6.36	4.3	9.0	ppb	Byproduct of drinking water disinfection.

NOTE: Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

UNREGULATED CONTAMINANT MONITORING RULE 2 (UCMR2)

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2009	N-nitrosodimethylamine (NDMA)	0.0023	0	0.0023	ppb	Byproduct of manufacturing process.

NOTE: Unregulated contaminants are those for which 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 regulation is warranted. Any unregulated contaminants detected are reported in this report. For additional information and data visit <http://www.epa.gov/safewater/ucmr/ucmr2/index.html>, or call the Safe Drinking Water Hotline at (800) 426-4791.

LEAD AND COPPER

Year	Contaminant	90th Percentile		Action Level (AL)		Sites		Unit of Measure	Source of Contaminant
		MCLG	MCL	Over	Violation				
2010	Lead	3	15	15	0	N		ppm	Corrosion of customer plumbing. Action Level = 15
2010	Copper	0.879	1.3	1.3	0	N		ppm	Byproduct of drinking water disinfection. Action Level = 1.3

Additional Health Information for Lead: Lead was not detected during testing as indicated by this report. 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 NTMWD 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	Highest Single Measurement	Lowest Monthly % of Samples Meeting		Turbidity	Unit of Measure	Source of Contaminant
			Limits	Limits			
2010	Turbidity	1.14	99.86	0.3	NTU	Soil runoff.	

NOTE: 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.

TOTAL ORGANIC CARBON

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2010	Source Water	4.34	3.06	9.32	ppm	Naturally present in the environment.
2010	Drinking Water	3.17	2.22	5.74	ppm	Naturally present in the environment.
2010	Removal Ratio	30%	15%	45%	% removal *	N/A

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

NOTE: 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 (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

TOTAL COLIFORM

Year	Contaminant	Highest Monthly Number of Positive Samples	MCL	Unit of Measure	Source of Contaminant
2010	Total Coliform Bacteria	1.6	*	Presence	Naturally present in the environment.

* Two or more coliform found samples in any single month.

NOTE: Reported monthly tests found no fecal coliform bacteria. Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

SECONDARY AND OTHER CONSTITUENTS NOT REGULATED (No associated adverse health effects)

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2010	Bicarbonate	100	73	120	N/A	ppm	Corrosion of carbonate rocks such as limestone.
2010	Calcium	56	34	87	N/A	ppm	Abundant naturally occurring element.
2010	Chloride	28	24	34	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2010	Copper	0.09	0.04	0.13	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2010	Hardness as Ca/Mg	174	162	185	N/A	ppm	Naturally occurring calcium and magnesium.
2010	Iron	<0.2	<0.2	<0.2	0.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2010	Magnesium	4	3.6	4.7	N/A	ppm	Abundant naturally occurring element.
2010	Manganese	< 0.001	< 0.001	0.002	0.05	ppm	Abundant naturally occurring element.
2010	Nickel	0.04	0.03	0.05	N/A	ppm	Erosion of natural deposits.
2010	pH	7.8	7.4	8.6	>7.0	units	Measure of corrosivity of water.
2010	Sodium	32	25	36	N/A	ppm	Erosion of natural deposits; byproduct of oil field activity.
2010	Sulfate	79	56	96	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2010	Total Alkalinity as CaCO ₃	100	73	120	N/A	ppm	Naturally occurring soluble mineral salts.
2010	Total Dissolved Solids	346	336	355	1000	ppm	Total dissolved mineral constituents in water.
2010	Total Hardness as CaCO ₃	149	107	186	N/A	ppm	Naturally occurring calcium.
2010	Zinc	<0.01	<0.01	0.17	5	ppm	Moderately abundant naturally occurring element used in the metal industry.

Total Trihalomethanes

Some people who drink water-containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous systems, and may have an increased risk of getting cancer.

Lead

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that the lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your kitchen tap for 30 seconds to 2 minutes before using the tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Taste and Odor

Each summer, throughout the months of July and August, lakes and other surface water supplies experience a natural event – an “algal bloom.” Algal blooms are common to surface water supplies in warm weather climate states like Texas. The algal blooms are responsible for the grassy, earthy taste and smell that may occur during the hot and dry season. The blue-green algae species Nostoc and Anabaena as it reproduces, or better known as “blooms,” releases an oily organic substance responsible for the taste and odor changes to the water during the summer months. The algal blooms, although aesthetically undesirable to the consumer, do not alter the high quality of treated water supplies delivered to the City of Rockwall. The treated water supply remains safe with no health hazards created by the “algal bloom.”