

2007 Drinking Water Quality Report (Consumer Confidence Report)

City of Round Rock
(512) 341-3333

The United States Environmental Protection Agency (EPA) requires that all drinking water suppliers provide a water quality report to their customers on an annual basis. This Drinking Water Quality Report provides information on the City of Round Rock drinking water.

En Espanol

Este reporte incluye informacion importante sobre el agua para tomar. Para obtener una copia de esta informacion traducida al Espanol, favor de llamar al telefono (512) 341-3331.

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 EPA required tests and is presented in is report. We hope this information helps you become more knowledgeable about what is in your drinking water.

Where Your Water Comes From

Round Rock drinking water customers receive their water from ground and surface water sources. Approximately 75 percent comes from Lake Georgetown and the remainder comes from the Edwards Aquifer. The Texas Commission on Environmental Quality (TCEQ) completed an assessment of our source waters and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detection of these contaminants will be found in this Consumer Confidence Report. To obtain more information on source water assessments and protection efforts in our water system, please call the Water Treatment Plant at (512) 341-3333.

It is important to protect drinking water by protecting our water sources. You can help by disposing of hazardous home chemicals properly. For disposal information, call (512) 218-5559 or go to roundrocktexas.gov/recycle.



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 home treatment 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 at (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 are called secondary constituents and are regulated by the State of Texas, not EPA. These constituents are not causes for health concerns. Therefore, secondary constituents are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:

Some people may be more vulnerable to contaminants in drinking water than the general population. 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/Centers for Disease Control and Prevention (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 at (800) 426-4791.

About The Following Pages

The pages that follow list all of the federally regulated or monitored constituents which have been found in your drinking water. EPA requires water systems to test up to 97 constituents.

PUBLIC PARTICIPATION OPPORTUNITIES

The public is welcome to attend the Round Rock City Council meetings held each second and fourth Thursday at 221 E. Main Street in Round Rock. For specific questions related to this report, please call (512) 341-3333 or email kiml@round-rock.tx.us.

WATER HARDNESS

Many consumers believe that their water must be softened in order to prevent damage to plumbing and fixtures. This is untrue. The average water hardness in Round Rock is 200 mg/L or approximately 11.5 grains per gallon. While this level of hardness may cause minor aesthetic problems such as water spots and dry skin, it does not cause damage to plumbing.

The city routinely performs laboratory tests to measure the stability of the drinking water. The stability refers to whether the water is aggressive or depositional. Test results indicate that the City of Round Rock drinking water, as delivered to your home, is stable. Please see page 3 of this report and our web site, www.roundrocktexas.gov for more information.

DEFINITIONS

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 Contaminant Level (MCL)

The highest permissible level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs

as feasible using the best available treatment technology.

Maximum Residual Disinfectant Level (MRDL)

The highest level of disinfectant allowed in drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG)

The level of a drinking water disinfectant below which there is no known or expected risk to health.

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.

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 (ug/L)

ppt - parts per trillion, or nanograms per liter

ppq - parts per quadrillion, or picograms per liter

**Water Conservation
Summer Watering Calendar**

If your address ends in	Then your watering days are...			
	June	July	August	September
0 or 9	5,10,15,20,25,30	5,10,15,20,25,30	4,9,14,19,24,29	3,8,13,18,23,28
1 or 8	1,6,11,16,21,26	1,6,11,16,21,26,31	5,10,15,20,25,30	4,9,14,19,24,29
2 or 7	2,7,12,17,22,27	2,7,12,17,22,27	1,6,11,16,21,26,31	5,10,15,20,25,30
3 or 6	3,8,13,18,23,28	3,8,13,18,23,28	2,7,12,17,22,27	1,6,11,16,21,26
4 or 5	4,9,14,19,24,29	4,9,14,19,24,29	3,8,13,18,23,28	2,7,12,17,22,27

See the City's web site for more information on Water Conservation (www.roundrocktexas.gov).

Inorganics

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Source of Constituent
2002	Arsenic	0	0	0	10	0	ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production.
2002	Barium	0.045	0.03	0.0325	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2007	Chromium	0.001	<0.001	0.001	0.1	0.1	ppm	Discharge from steel and pulp mills; erosion of natural deposits.
2007	Fluoride	1.4	0.1	0.65	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth.
2007	Nitrate (Surface Water)	0.32	0.32	0.32	10	10	ppm	Runoff from fertilizer use; Leachate from septic tanks, sewage; erosion of natural deposits.
2006	Nitrate (Ground Water)	0.87	0.87	0.87	10	10	ppm	Runoff from fertilizer use; Leachate from septic tanks, sewage; erosion of natural deposits.

Lead and Copper

Year	Constituent	90 th Percentile	Sites Exceeding Action Level	Action Level	Units	Source of Constituent
2007	Lead	0.0081	0	0.015	ppm	Corrosion of household plumbing systems; erosion of natural deposits.
2007	Copper	0.651	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits.

Disinfection Byproducts

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Source of Constituent
2007	Total Trihalomethanes	72.5	33.5	54.733	80	0	ppb	Byproduct of drinking water chlorination.
2007	Haloacetic Acids	56.5	17.1	37.433	60	0	ppb	Byproduct of drinking water chlorination.

Disinfectant Residuals

Year	Constituent	High	Low	Average	MRDL	MCLG	Units	Source of Constituent
2007	Chloramine	3.2	0.5	1.6	4	<4	ppm	Disinfectant used to control microbes.

Total Organic Carbon of the Source Water

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Source of Constituent
2007	Total Organic Carbon	5.26	2.88	4.09	None Established		ppm	Naturally occurring organic material. There are no health effects directly associated with TOC.

Turbidity

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Source of Constituent
2007	Turbidity	0.34	0.06	0.132 0%>.3	0.3	NA	NTU	Soil runoff.
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.								

Langelier Saturation Index

Surface Water Average = -0.395

Ground Water Average = -0.076

Results between -0.5 and 0.5 indicate that the water is balanced or stable.

Unregulated Contaminants

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Source of Constituent
2007	Dibromochloromethane	11.7	2	6.033	None Established		ppb	Unregulated contaminant, monitoring helps EPA determine where certain contaminants occur and whether those contaminants need to be regulated.
2007	Chloroform	38	6.6	27.1	None Established		ppb	
2007	Bromoform	3.8	0.5	1.766	None Established		ppb	
2007	Bromodichloromethane	17.1	11.7	14.266	None Established		ppb	
2007	Bromoacetic acid	0	0	0	None Established		ppb	
2007	Bromochloroacetic acid	7.9	7.2	7.55	None Established		ppb	
2007	Chloroacetic acid	5.8	0	2.9	None Established		ppb	
2007	Dibromoacetic acid	5.9	1.3	3.6	None Established		ppb	
2007	Dichloroacetic acid	28.6	8	18.3	None Established		ppb	
2007	Trichloroacetic acid	20.8	3.2	12	None Established		ppb	
2007	Hardness (surface water)	226	122	185	None Established		mg/L	
2007	Hardness (ground water)	324	178	303	None Established		mg/L	

Coliform

Year	Constituent	High % of Positive Samples	MCL	Units	Source of Constituent
2007	Total Coliform	1.98%	Presence in 5% or more of the monthly samples.	presence	Naturally present in environment.
2007	Fecal Coliform	Reported tests found no fecal coliform.			
<p>Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them 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 harder than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.</p> <p>Fecal coliform bacteria and, in particular, <i>E. coli</i>, are members of the coliform bacteria group originating in the intestinal tract of warm-blooded animals and are passed into the environment through feces. The presence of fecal coliform bacteria (<i>E. coli</i>) in drinking water may indicate recent contamination of the drinking water with fecal material.</p>					

Cryptosporidium

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Source of Constituent
2007	Cryptosporidium	0.1	0	0.01	None Established		Oocysts.	Naturally present in environment
<p>Cryptosporidium is a microbial pathogen that may be found in water contaminated by feces. Although filtration removes Cryptosporidium, it cannot guarantee 100 percent removal nor can the testing methods determine if the organisms are alive and capable of causing cryptosporidiosis, an abdominal infection with nausea, diarrhea and abdominal cramps that may occur after ingestion of contaminated water.</p>								

Radiochemicals

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Source of Constituent
2005	Radium 228	<1.0	<1.0	<1.0	5	0	pci/L	Decay of natural manmade products.
2005	Gross beta emitters	<4.0	<4.0	<4.0	50	0	pci/L	Decay of natural manmade products.
2005	Gross Alpha particles	<2.0	<2.0	<2.0	15	0	pci/L	Decay of natural manmade products.

Availability of Unregulated Contaminant Monitoring Rule Data (UCMR)

We participated in gathering data under the UCMR in order to assist EPA in determining the occurrence of possible drinking water contaminants. If any unregulated contaminants were detected, they are shown in the tables elsewhere in this report. These data may also be found on EPA's web site at <http://www.epa.gov/safewater/data/ncod.html>, or you can call the Safe Drinking Water Hotline at (800) 426-4791.