

**2012 Drinking Water Quality Report
City of Richland Hills
Public Works Administration (817) 616-3830**

Our Drinking Water Is Regulated

This report is a summary of the quality of water we provide to our customers. The analysis was made by using data from the most recent U. S. Environmental Protection Agency (EPA) required testing and is presented in the following information. We hope this information helps you become more knowledgeable about what's in your drinking water.

En Español

Este reporte incluye información importante sobre el agua potable. Si tiene preguntas ó comentarios sobre este informe en español, favor de llamar al tel. (817)616-3830 para hablar con una persona bilingüe en español

Where do we get our drinking water?

Our drinking water is obtained from GROUND AND SURFACE water sources. It comes from the following Lake/River/Reservoir/Aquifer: PALUXY, TRINITY, AND CEDAR CREEK. The Texas Commission of Environmental Quality is currently updating a Source Water Susceptibility Assessment for your drinking water. 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 on the Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>. The water we purchase from Fort Worth comes from the Cedar Creek Reservoir and is owned and operated by the Tarrant Regional Water District (TRWD). The Texas Commission on Environmental Quality (TCEQ) is conducting an assessment of the Fort Worth and TRWD water supply sources. The Fort Worth and the TRWD water systems are susceptible to some contaminants, using criteria developed by TCEQ in its federally approved Source Water Assessment Program. The assessment report consists of maps showing the assessment area, an inventory of known land use activities of concern and documentation of specific contaminants of concern. This report is available by contacting the Fort Worth Water Department office at 1000 Throckmorton Street, 2nd floor. 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 (800) 426-4791.

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; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with 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.

Cryptosporidium Testing

Tarrant Regional Water District monitors the raw water from all Fort Worth intakes for Cryptosporidium, Giardia Lambia and viruses. The source is human and animal fecal waste in the watershed. The 2012 monthly testing revealed very low levels. The testing methods used cannot determine if the parasite is dead or alive and capable of causing cryptosporidiosis. This is an abdominal infection that causes nausea, diarrhea and abdominal cramps after ingestion. The drinking water treatment process is designed to remove these through filtration.

Public Participation Opportunities

The Richland Hills City Council meets on the 1st and 3rd Tuesday of each month at 7:00 p.m. in the council chambers at 3200 Diana Drive. If you have questions about Richland Hills' drinking water quality, or would like to schedule a meeting for your group or organization please call (817) 616-3830.

Water Sources: The sources of drinking water (both tap 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.

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 Information

The following information lists all the federally regulated or monitored contaminants which have been found in Richland Hills' drinking water in 2012. The U.S. EPA requires water systems to test for up to 97 contaminants. The data included is from calendar year 2012 unless otherwise indicated. In addition, since Richland Hills receives much of its water from the City of Fort Worth, the levels included are a compilation of both entities annual sampling results with the highest detected levels being shown.

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 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 contaminants.

Maximum Residual Disinfectant Level (MRLD) –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.

Treatment Technique (TT) – A required process intended to reduce the level of contaminants 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

N/A – Not Applicable. **AVG:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

ABBREVIATIONS:

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)

NTU – Nephelometric Turbidity Units

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

Lead and Copper:

"If present, elevated levels of lead can lead to 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 private plumbing. This water supply 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 two 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>."

Year	Contaminant	The 90 th Percentile ¹	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2010	Lead	0.0015	0	0.015	mg/L	Corrosion of household plumbing systems; erosion of natural deposits.
2010	Copper	0.24	0	1.3	mg/L	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Maximum Residual Disinfectant Level

Year	Disinfectant	Average level	Minimum Level	Maximum Level	MRLD	MRDLG	Unit of Measure	Source of Chemical
2012	Chloramines	3.0	0.50	4.0	4.0	4.0	ppm	Disinfectant used to control microbes.

Disinfection Byproducts

Year	Contaminant	2012 Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2012	Total Haloacetic Acids	15.2	4.4	15.2	60	ppb	Byproduct of drinking water disinfection.
2012	Total Trihalomethanes	38.0	6.8	38.0	80	ppb	Byproduct of drinking water disinfection.

Unregulated Initial Distribution System Evaluation for Disinfection Byproducts WAIVED OR NOT YET SAMPLED

Regulated Contaminants

Contaminant	Measure	MCL	2012 Level	Range of Detects	MCLG	Common Sources of Substance
Beta particles & Photon emitters (2011 testing)	pCi/L	50	7.5	0.0 to 7.5	N/A	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beta radiation.
Fluoride	ppm	4	0.98	0.48 to 1.86	4	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	MG/L	10	0.69	0.12 to 0.91	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (measured as Nitrogen)	ppm	1	0.52	0.01 to 0.52	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Arsenic	ppb	10	1	.03 to 1	0	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium	ppm	2	0.06	0.04 to 0.06	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Turbidity ²	NTU	TT	0.45 highest single result 99.9% Lowest monthly % of samples ≤0.3 NTU	N/A	N/A	Soil runoff
Total Coliforms	% of Positive Samples	>5% of monthly samples	Presence in 3.4% of monthly samples in Fort Worth	0.0 to 3.4%	0	Coliforms are naturally present in the environment as well as feces; fecal coliforms and E. coli only come from human and animal fecal waste
Contaminant	High	Low	Average	MCL	MCLG	Common Sources of Substance
Total Organic Carbon ³	1	1	1	TT = % removal	N/A	Naturally occurring

Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

¹90th percentile value: 90% of the samples were at or below this value. EPA considers the 90th percentile value the same as an average.

²Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

³Total Organic Carbon is used to determine disinfection by-product precursors. Fort Worth was in compliance with all monitoring and treatment technique requirements for disinfection by-product precursors.

Organic Contaminants

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2012	Di(2-ethylhexyl)phthalate	0.26	0	0	6	6	ppb	Discharge from rubber and chemical factories.
2012	Atrazine	<0.1 UG/L	<0.1 UG/L	<0.1 UG/L	3	3	ppb	Runoff from herbicide used on row crops.

Unregulated Contaminants⁴

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2012	Chloroform	4.0	<1.0	6.4	ppb	Byproduct of drinking water disinfection
2012	Bromodichloromethane	5.31	<1.0	12.2	ppb	Byproduct of drinking water disinfection
2012	Dibromochloromethane	2.16	1.0	3.5	ppb	Byproduct of drinking water disinfection

⁴ Chloroform, bromodichloromethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Secondary Constituents

This is a list of other items for which the water is tested. These items do not relate to public health but rather to the aesthetic effects.

Item	Measure	2012 Range
Bicarbonate	ppm	93 to 120
Calcium	ppm	97 to 110
Chloride	MG/L	93.4 to 97
Conductivity	µmhos/cm	318 to 423
pH	units	8.0 to 8.5
Magnesium	ppm	4 to 8
Sodium	ppm	14 to 28
Sulfate	ppm	25 to 38
Total Alkalinity as CaCO ₃	ppm	93 to 120
Total Dissolved Solids	ppm	172 to 237
Total Hardness as CaCO ₃	ppm	117 to 133
Total Hardness in Grains	grains/gallon	7 to 8