

In 2017, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The Texas Commission on Environmental Quality (TCEQ) has established public water system ratings, and Richland Hills's water supply system received the highest achievable rating. Superior.

Where Do We Get Our Drinking Water?

Our drinking water is obtained from **GROUND AND SURFACE** water sources.

The surface water is purchased from The City of Fort Worth. Fort Worth uses water from Lake Worth, Eagle Mountain Lake, Lake Bridgeport, Richland Chambers Reservoir, Cedar Creek Reservoir, Lake Benbrook and the Clear Fork Trinity River. Fort Worth owns Lake Worth. The U.S. Army Corp of Engineers is responsible for Benbrook Lake. The other four lakes are owned and operated by Tarrant Regional Water District. The groundwater supply is from the Trinity and Paluxy aquifers and operated by Richland Hills. The average daily water consumption for Richland Hills is approximately one million gallons.

Information For Immuno-compromised People

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 for 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 EPA's Safe Drinking Water Hotline 1-800-426-4791.

How Can I Get Involved?

By attending a Richland Hills City Council meeting on the 2nd or 4th Monday of each month at 7:00 p.m. in the council chambers at 3200 Diana Drive. If you have a question about Richland Hills' drinking water quality, or would like to schedule a meeting for your group or organization please call (817)616-3830.

En Español

Éste reporte incluye importante información sobre el agua potable. Si tiene preguntas ó comentarios sobre éste reporte, puede comunicarse con una representate bilinqüe al teléfono 817- 616-3830.

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 2017. The U.S. EPA requires water systems to test for contaminants and must meet all regulations for water safety and quality. The data included is from calendar year 2017 unless otherwise indicated. In addition, because Richland Hills purchases much of its water from the City of Fort Worth, the levels are a compilation of both entities annual sampling results with the highest detected levels shown.

TCEQ Accesses Raw Water Supplies

The Texas Commission on Environmental Quality (TCEQ) completed an assessment of our source waters. TCEQ classified the risk to Fort Worth and Richland Hills source waters as high for most contaminants. High susceptibility means there are activities near the source water or watershed making it very likely that chemical constituents may come into contact with the source water. It does not mean that there are any health risks present. Tarrant Regional Water District, from which Fort Worth purchases its water, received the assessment reports. For more information on Fort Worth source water assessments and protection efforts, contact Stacy Walters at 817-392-8203 or email Stacy.Walters@FortWorthTexas.gov. The sampling requirements for our water system are based on this susceptibility and previous sample data. Detection of these contaminants will be found in this report. For more information on source water protection efforts at our system, contact Cathy Riegel at 817-616-3830 or email criegel@richlandhills.com. Further details about the source water assessments are available at the following URL:

http://dww2.tceq.texas.gov/DWW/JSP/SWAP.jsp?tinwsys_is_number=5809&tinwsys_st_code=TX&wsnumber=TX2200022%20%20%20&DWWState=TX

Microorganism Testing Show Low Detections In Fort Worth Water Sources

Tarrant Regional Water District monitors the raw water at all Fort Worth water intake sites for *Cryptosporidium*, *Giardia Lamblia* and viruses. The source is human and animal fecal waste in the watershed. The 2017 sampling showed low levels of *Giardia Lamblia*, which is common in surface water. The table below indicates when detections were found in each raw water source. *Cryptosporidium* and viruses were not detected in any of the samples. Viruses are treated through disinfection processes. *Cryptosporidium* and *Giardia Lamblia* are removed through a combination of disinfection and/or filtration.

Intake Location	<i>Cryptosporidium</i>	<i>Giardia Lamblia</i>	Adenovirus	Enterovirus	Astrovirus	Rotavirus
Richland-Chambers Reservoir	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
Cedar Creek Lake	Not detected	March	Not detected	Not detected	Not detected	Not detected
Lake Benbrook	Not detected	May	Not detected	Not detected	Not detected	Not detected
Eagle Mountain Lake	Not detected	January	Not detected	Not detected	Not detected	Not detected
Lake Worth	Not detected	January	Not detected	Not detected	Not detected	Not detected
Clear Fork of Trinity River	Not detected	January, February, April, May, June	Not detected	Not detected	Not detected	Not detected



All Water May Contain Contaminants

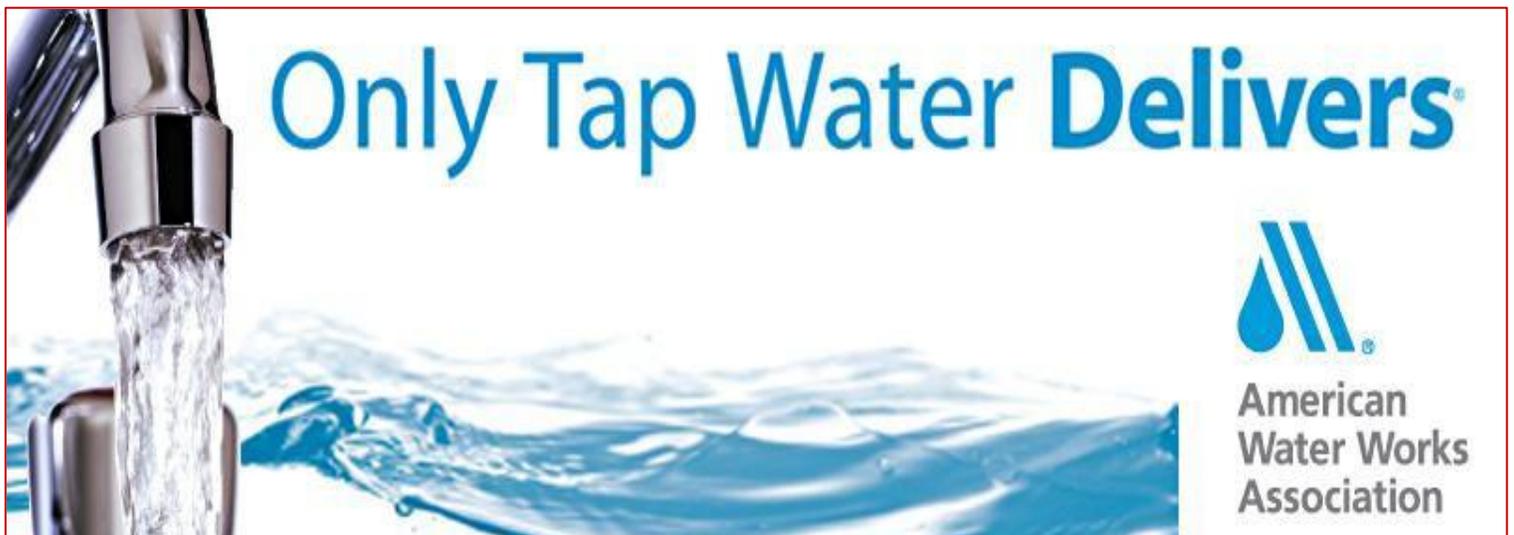
The sources of drinking water, for both tap and bottled water, include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground it dissolves naturally occurring minerals and radioactive material. Water can also pick up substances resulting from animal waste or human activity. Contaminants that may be present in source water before treatment include microbes, inorganic contaminants, pesticides, herbicides, radioactive materials and organic chemical contaminants. In addition, contaminants found in drinking water may cause taste, color or odor issues. These types of issues are not necessarily cause for health concern. For more information on taste, odor or the color of your drinking water please contact a water representative at 817-616-3830.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency and the Texas Commission on Environmental Quality regulate limit the amount of certain contaminants in water provided by the public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide protection for public health.



Abbreviations Used In Tables:

- **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.
- **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 (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.
- **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.
- **NTU** – Nephelometric Turbidity Units
- **MFL** – million fibers per liter (a measure of asbestos)
- **ppb** – parts per billion, or micrograms per liter ($\mu\text{g}/\text{L}$)
- **pCi/L** – picocuries per liter (a measure of radioactivity)
- **ppt** – parts per trillion, or nanograms per liter
- **ppm** – parts per million, or milligrams per liter (mg/L)
- **ppq** – parts per quadrillion, or picograms per liter



2017 Drinking Water Quality Test Results

Lead and Copper

Year	Contaminant	The 90 th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2016	Lead	0	0	0.015	mg/L	Corrosion of household plumbing systems, erosion of natural deposits
2016	Copper	0.3	0	1.3	mg/L	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives.

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://water.epa.gov/drink/info/lead/index.cfm>

Contaminant	Measure	MCL	2017 Highest single result	Lowest monthly % of samples ≤0.3 NTU	Violation	Common Sources of Substance
Turbidity	NTU	TT	0.6	99.8%	No	Soil

Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of the filtration system in Fort Worth's water.

Contaminant	Measure	MCL	2017 Level	Range	MCLG	Common Sources of Substance
Total Coliforms (including fecal coliform & E. coli)	% of positive samples	Presence in 5% or less of monthly samples	No monthly samples tested positive	0	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

Richland Hills' monthly tests found no total coliform bacteria in 2017

Maximum Residual Disinfectant Level

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Contaminant
2017	Chloramines	2.35	0.60	4.0	4.0	4.0	ppm	Water additive used to control microbes
Contaminant		High	Low	Average	MCL		MCLG	Common Sources of Substance
Total Organic Carbon ₁		1	1	1	TT = % removal		N/A	Naturally occurring

Testing for Total 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.

Contaminant	Measure	MCL	2017 Level	Range	MCLG	Common Sources of Substance
Combined Radium (-226 & -228),	pCi/L	5	2.5	N/A	0	Erosion of natural deposits of certain minerals that are radioactive and may emit forms of radiation known as alpha radiation
Beta particles & photon emitters,	pCi/L	50	5.6	4.4 to 5.6	N/A	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photon and beta radiation
Arsenic	ppb	10	2	0 to 2	0	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	ppm	2	0.08	0.023 to 0.08	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium(Total)	ppb	100	6.1	0 to 6.1	100	Discharge from steel and pulp mills, erosion of natural deposits
Cyanide	ppb	200	57	0 to 57	200	Erosion of natural deposit
Fluoride	ppm	4	1.85	0.32 to 1.85	4	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	ppm	10	1.324	0.18 to 1.324	10	Runoff from fertilizer use/ leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (measured as Nitrogen)	ppm	1	0.42	0.01 to 0.42	1	Runoff from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Atrazine	ppb	3	3	0.0 to 0.1	3	Discharge from petroleum refineries, fire retardants, ceramics, electronics, solder, test addition
Bromate	ppb	10	1.89	0 to 1.89	0	By-product of drinking water disinfection
Haloacetic Acids (HAA5)	ppb	60	12.9	1.4 to 12.9	N/A	By-product of drinking water disinfection
Total Trihalomethanes	ppb	80	18.9	4.7 to 18.9	N/A	By-product of drinking water disinfection

Because of historically low levels of radionuclides in Fort Worth's water, TCEQ monitoring is on a reduced schedule. The test results are from 2013 through 2014.

In the water loss audit submitted to the Texas Water Development Board for the time period of January 2017 to December 2017, our system lost an estimated 18,290,713 gallons. If you have any questions about the water loss audit, please call **(817)616-3830**.

On November 27, 2017 the TCEQ sent Richland Hills a notice of violation regarding the CCR adequacy/availability/content of the 2016 Water Quality Report because the copy s to the TCEQ still had the 2015 border instead of the 2016 border. The copy mailed to Richland Hills' customers and posted online did have the correct border and this violation was placed back into compliance status on December 11, 2017.

Unregulated Contaminants

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.

Contaminant	Measure	Range of Detects	2017 Level	MRDL	MRDLG	Common Sources of Substance
Chloral Hydrate	ppb	0.18 to 0.70	0.70	Not regulated	0	By-product of drinking water disinfection
Bromoform	ppb	0 to 11	11	Not regulated	0	By-products of drinking water disinfection; not regulated individually; included in Total Trihalomethanes
Bromodichloromethane	ppb	0 to 7.81	7.81	Not regulated	0	
Chloroform	ppb	0 to 7.96	7.96	Not regulated	0.07	
Dibromochloromethane	ppb	1.09 to 8.51	8.51	Not regulated	0.06	
Bromochloroacetic Acid	ppb	0 to 3.7	3.7	Not regulated	0	By-products of drinking water disinfection; not regulated individually; included in Haloacetic Acids
Monochloroacetic Acid	ppb	0 to 7.2	7.2	Not regulated	0.07	
Dichloroacetic Acid	ppb	0 to 8.6	8.6	Not regulated	0	
Trichloroacetic Acid	ppb	0 to 1.60	1.60	Not regulated	0.02	
Monobromoacetic Acid	ppb	0 to 3.10	3.10	Not regulated	N/A	
Dibromoacetic Acid	ppb	1.4 to 15.3	15.3	Not regulated	N/A	

Secondary Constituents

These items do not relate to public health but rather to the aesthetic effects. These items are often important to industry. Results are from the most recent testing.

Item	Measure	2017 Range
Bicarbonate	ppm	108 to 529
Calcium	ppm	2.20 to 50.6
Chloride	ppm	11.6 to 92.9
Conductivity @ 25C	µmhos/cm	299 to 1510
pH	units	7.0 to 8.6
Magnesium	ppm	.818 to 7.78
Manganese	ppm	0.0012 to 0.0022
Potassium	ppm	1.33 to 1.38
Sodium	ppm	9.57 to 334
Sulfate	ppm	24.8 to 205
Total Alkalinity as CaCO ₃	ppm	<20 to 145
Total Dissolved Solids	ppm	116 to 895
Total Hardness as CaCO ₃	ppm	9 to 157
Total Hardness in Grains	grains/gallon	.52 to 9.18

Emergency Interconnection

From April 24 to April 25 2017, Fort Worth used the emergency interconnection with the Trinity River Authority of Texas-Tarrant Water Supply Project to supply water to the Centreport portion of the Fort Worth distribution system while repairs were made. The volume of water was subsequently repaid to TRA-TCWSP the next day via the emergency interconnection.

To obtain the TRA-TCWSP water quality data, please contact Cathy Riegel at 817-616-3830.