

This report is a summary of the quality of water the City of North Richland Hills provides to 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 is in your drinking water.

### En Español

Este reporte incluye importante información sobre el agua potable. Si tiene preguntas ó comentarios sobre éste reporte, puede comunicarse con una representante bilingüe al teléfono (817) 427-6440.

### Where do we get our drinking water?

The City of North Richland Hills purchases water from the City of Fort Worth and the Trinity River Authority (TRA).

### State Agency Assessed Source Waters

The City of Fort Worth uses surface water from Lake Worth, Eagle Mountain Lake, Lake Bridgeport, Richland Chambers Reservoir, Cedar Creek Reservoir, Lake Benbrook and the Clear Fork Trinity River.

The Trinity River Authority (TRA) uses surface water from Lake Arlington.

Texas Commission on Environmental Quality (TCEQ) completed an assessment of your source water. TCEQ classified the risk to our source waters as high for most contaminants. High susceptibility means there are activities near the source water or a watershed make 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. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminations may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Public Works at (817) 427-6457 or email [tngo@nrhtx.com](mailto:tngo@nrhtx.com).

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. The report is available by contacting the Fort Worth Water Department office at 1000 Throckmorton Street in Fort Worth, Texas or the Trinity River Authority at 11201 Trinity Boulevard in Euless, Texas.

More information about the source water assessments is available online at:

[www.tceq.texas.gov/drinkingwater/SWAP/index\\_swa.html](http://www.tceq.texas.gov/drinkingwater/SWAP/index_swa.html)



## **EVERY DROP OF WATER COUNTS CONSERVE TODAY FOR TOMORROW.**

### **Special Notice For THE ELDERLY, INFANTS, CANCER PATIENTS, People with HIV/AIDS Or Other Immune Problems**

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. EPA/Centers for Disease Control and Prevention (CDC) offers guidelines on the appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the EPA's Safe Drinking Water Hotline at (800) 426-4791.

### 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 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 (800) 426-4791.

### Public Participation Opportunities

If you have concerns or questions about North Richland Hills' drinking water quality, or would like to request a speaker on this topic for a group or organization meeting, please call (817) 427-6457 or visit the City's website ([www.nrhtx.com](http://www.nrhtx.com)).

North Richland Hills' governing body, the City Council, meets the second and fourth Monday of the month at 7:00 p.m. at City Hall. Citizens are encouraged to attend Council Meetings. Please call (817) 427-6060 for information about the Council Meetings.

# The following information lists all of the federally regulated or monitored constituents, which have been found in your drinking water for 2021 calendar year.

## Secondary Constituents

Many constituents (such as calcium, sodium) 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 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.

## Cryptosporidium, Giardia & Viruses Monitoring

The 2021 sampling of lake water showed low-level detections of Giardia Lamblia, which is common in surface water. This micro pathogen, which may be found in water contaminated by feces. Cryptosporidium and viruses were not detected in any of the samples.

Required levels of inactivation are achieved through disinfection and filtration. 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 Cryptosporidium, an abdominal infection with nausea, diarrhea and abdominal cramps may occur after ingestion of contaminated water. No specific drug therapy has proven effective, but people with healthy immune systems usually recover within two weeks. Individuals with weak immune systems, however, may be unable to clear the parasite and suffer chronic and debilitating illness.

## What Is In the Water

The following charts list the contaminants that require monitoring or are regulated and detected in North Richland Hills' water. The data included is from calendar year 2021 unless otherwise indicated. In addition, since North Richland Hills purchases its water from the City of Fort Worth and Trinity River Authority, the levels included are a compilation of both entities annual sampling results with the highest detected levels being shown.

## Lead and Copper

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 private plumbing.

The City of North Richland Hills 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 EPA's Safe Drinking Water Hotline (800) 426-4791 or at <http://www.epa.gov/safewater/lead>.

**North Richland Hills's water did not exceed any of the Lead and Copper regulated limits in 2021.**

## North Richland Hills Water Loss for 2021

For the calendar year 2021, our system lost an estimated 296,642,694 gallons of water per the audit submitted to the Texas Water Development Board. Water loss is typically caused by water main breaks and leaks, service line leaks, unauthorized usage and meter inaccuracies.

If you have any question about the water loss audit please call (817) 427-6457.

## Abbreviations used in tables

**Maximum Contaminant Level (MCL)** - The highest permissible level of a contaminant in drinking water. MCL's are set as close to the MCLG's 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. MCLG's allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL)** - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the 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 health risk. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**N/A** - Not Applicable.

**Treatment Technique (TT)** - A required process intended to reduce the level of a contaminant in drinking water.

**Action Level** - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**NTU** - Nephelometric Turbidity Units (a measure of water turbidity or clarity)

**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).

## Regulated Contaminants

Contaminant	Unit	MCL	NRH Water Highest Level Detected	Range of Detection	Violation	Common Sources of Substance
Arsenic	ppb	10	1.5	0 - 1.5	NO	Erosion of natural deposits; runoff from orchards; runoff from grass and electronics production wastes.
Atrazine	ppb	3	0.2	0 - 0.2	NO	Runoff from herbicides used on row crops.
Barium	ppm	2	0.07	0.05 - 0.07	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Beta particles & Photon emitters	pCi/L	50 <sup>1</sup>	7	5.2 - 7	NO	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.
Bromate	ppb	10 <sup>2</sup>	13.6	0 - 13.6	NO	By-product of drinking water distribution.
Chromium	ppb	100	2.2	0 - 2.2	NO	Erosion of natural deposits; discharge from steel and pulp mills.
Cyanide	ppb	200	197	55.9 - 197	NO	Discharge from plastic and fertilizer factories; discharge from steel and metal factories.
Fluoride	ppm	4	0.68	0.18 - 0.68	NO	Water additive, which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories.
Nitrite (measure as Nitrogen)	ppm	1	0.66	0.13 - 0.66	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Turbidity	NTU	TT = 1.0	0.7	0.03 - 0.7	NO	Soil runoff (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.)
	%	TT =95	100	100 - 100		
Uranium	ppb	30	1.1	1.1 - 1.1	NO	Erosion of natural deposits.

<sup>1</sup>MCLG and MCL are given in exposure units of milirem/year (set at 0 and 4 respectively), but samples are measured in activity units of picoCuries/Liter (pCi/L). EPA considers 50pCi/L to be the level of concern for Beta particles.

<sup>2</sup>Compliance is based on Running Annual Average of monthly average for Bromate at the end of each quarter, which has less than 5 ppb for each quarter in 2021.

## Regulated in the Distribution System

Contaminant	Unit	MCL	MCLG	Highest Level Detected	Range of Detection	Violation	Common Sources of Substance
Nitrate (measured as Nitrogen)	ppm	10	10	0.384	0.151 - 0.384	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Haloacetic Acids <sup>3</sup> (HAA5)	ppb	60	N/A	23.8	4.3 - 23.8	NO	By-product of drinking water disinfection.
Total Trihalomethanes <sup>3</sup> (TTHM)	ppb	80	N/A	54.2	7.04 - 54.2	NO	
Total Coliforms <sup>4</sup> (including fecal coliform & E. Coli)	% of positive samples	Present in 5% of samples	0	2.6 %	0	NO	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	Unit	MRDL	Ideal Goal (MRDLG)	North Richland Hills Water Average	Range of Detection	Violation	Common Sources of Substance
Chloramines	ppm	4	4	2.625	0.53 to 3.9	NO	Water additive to control microbes.
Contaminant	High	Low	MCLG	Range of Detection	MCL	Violation	Common Sources of Substance
Total Organic Carbon <sup>5</sup>	1.34	1.1	N/A	1.1 to 1.34	TT = 1.0 removed	NO	Naturally occurring.

<sup>3</sup> Initial Distribution System Evaluation for Disinfection Byproduct. This evaluation is sampling required by EPA to determine the range of total Trihalomethanes and Haloacetic acid in the system. Some of these samples are regulated and some are non-regulated. In all cases, the samples were less than the highest allowed MCL. EPA also requires the data to be reported here.

<sup>4</sup> No more than 5.0% samples of coliform-positive in a month. Every sample that has total coliform must be analyzed for either fecal coliforms or E. coli. If two consecutive total coliforms-positive samples and one is also positive for E-coli fecal coliforms, system has an acute MCL violation.

<sup>5</sup> Total Organic Carbon is used to determine disinfection by-product precursors. North Richland Hills was in compliance with all monitoring and treatment technique requirements for disinfection by-product precursors.

## Regulated at the Customer's Tap

Contaminant (units)	90 <sup>th</sup> percentile Values <sup>6</sup>	No. of Sites Exceeding Action Level	MCL	MCLG	Violation	Common Sources of Substance in Drinking Water
Lead <sup>7</sup> (ppb)	1.4	0	Action Level = 15	0	NO	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing system.
Copper <sup>7</sup> (ppm)	0.2212	0	Action Level = 1.3	1.3	NO	Corrosion of household plumbing systems; Erosion of natural deposits.

<sup>6</sup> 90<sup>th</sup> percentile value: 90% of the samples were at or below this value. EPA considers the 90th percentile value the same as an "average" value for other contaminants. Lead and copper are regulated by a treatment technique that requires systems to control the corrosiveness of their water. If more than 10% of tap water samples exceed the action level, water systems must take additional steps.

<sup>7</sup> The test results shown above are from 2021. The next testing is currently scheduled for 2023.

## Unregulated Contaminants <sup>8</sup>

Contaminant (Units)	MRDL	PUBLIC HEALTH GOAL	NRH WATER AVERAGE	Range of Detection	Common Sources of Substance
Bromoform (ppb)	Not regulated	0	1.43	1.28 - 1.57	By-product of drinking water disinfection; not regulated individually; included in Total Trihalomethanes.
Bromodichloromethane (ppb)	Not regulated	0	11.43	2.55 - 19.50	
Chloroform (ppb)	Not regulated	70	13.73	2.96 - 23.60	
Dibromochloromethane (ppb)	Not regulated	60	5.91	1.53 - 11.00	
Dibromoacetic Acid (ppb)	Not regulated	N/A	1.7	1.1 - 2.4	By-product of drinking water disinfection; not regulated individually; included in Haloacetic Acids.
Dichloroacetic Acid (ppb)	Not regulated	0	10.6	4.3 - 15.1	
Monobromoacetic Acid (ppb)	Not regulated	N/A	1.14	1.0 - 1.30	
Monochloroacetic Acid (ppb)	Not regulated	70	2.13	1.20 - 4.30	
Trichloroacetic Acid (ppb)	Not regulated	20	3.79	1.30 - 5.50	

<sup>8</sup>Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

## Additional Parameters

This chart lists other compounds for which the water is tested. These compounds do not relate to public health but rather to the aesthetic effects. These compounds are often important to industrial users.

Compound	Measure	North Richland Hills Water
Acetone	ppb	9.35 - 9.35
Aluminum	ppb	35 - 35
Bicarbonate	ppm	99.9 – 138.0
Calcium	ppm	37.8 - 58.5
Chloride	ppm	13.7 – 36.7
Conductivity	umhos/cm	296 - 470
Copper	ppb	10 - 10
Magnesium	ppm	2.91 – 9.10
Manganese	ppb	5 - 5
Nickel	ppb	1.1 - 1.1
pH	units	7.4 – 9.1
Potassium	ppm	5.1 – 5.1
Sodium	ppm	15.0 – 34.0
Sulfate	ppm	22.6 – 51.5
Total Alkalinity as CaCO <sub>3</sub>	ppm	99.9 – 142.0
Total Dissolved Solids	ppm	149 - 249
Total Hardness as CaCO <sub>3</sub>	ppm	107 - 183
Total Hardness in grains	grains/gallons	6 - 11

## Source Water Assessments

As indicated previously in this report, the City of North Richland Hills purchases treated water from the City of Fort Worth and Trinity River Authority. North Richland Hills is also capable of utilizing well water; however, it is seldom required. TCEQ conducted source water assessments for all of Fort Worth's and TRA's drinking water sources. The source water assessments describe 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 this assessment will allow us to focus on source water protection strategies. More information about source water assessment and protection can be found at <http://cfpub.epa.gov/safewater/sourcewater> or you can contact Regulatory Compliance Office at (817) 427-6457 or email [tngo@nrhtx.com](mailto:tngo@nrhtx.com) for more information.