

# F&Q Frequently Asked Questions

## What is this report and why do I receive it every year?

Water system providers are mandated by federal law to provide their customers with an annual consumer confidence report (annual water quality report). This report serves many functions. It allows you, the user, to make informed choices about your water; also, it allows you to know what contaminants, if any, are in your water, and allows your water provider a chance to tell you everything it takes to deliver safe drinking water to your tap.

## What causes my water to occasionally have a “milky” appearance?

A “milky” look is caused when tiny air bubbles are in the water. These form when the water coming into your home or business is under pressure and gasses (air) are dissolved and trapped in the pressurized water. These bubbles will not affect the quality or the taste of your water.

## Is it okay to use hot water from the tap for cooking and drinking?

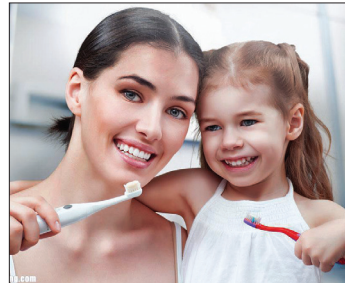
You should always use cold water since hot water has a higher chance of containing potential contaminants from your household plumbing and water heaters. These contaminants can include, but are not limited to rust, copper, and lead and can dissolve in hot water faster than they can in cold water.

## How much water do I use during a typical shower?

Based on the age of your house and your shower heads, anywhere from 20 to 40 gallons of water can be used during a typical shower.

## What can I do to conserve water?

There are many things you can do to conserve water. Running your clothes washer and dishwasher only when they are full can save up to 1,000 gallons a month. Watering your lawn and garden in the morning or evening when temperatures are cooler will help minimize evaporation. Shortening your shower by a minute or two can save up to 150 gallons per month. Turning off the water while you are brushing your teeth can save up to 25 gallons per month. Also, take time to review your water bill on a regular basis as this can help you quickly realize if there are leaks in your system.



## Public Participation Opportunities

The public is invited to participate at the next meeting

**Date:** July 26th, 2018 **Time:** 5:30pm—6:00pm

**Location:** City Hall Annex Building,  
6804 Main St., The Colony, TX 75056

**Phone:** (972) 624-4433

For more information about this report, or for any questions relating to your drinking water, please contact Jimmy Arthur, Water Production Department Supervisor, at (972) 624-4431.



## 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) 625-1756 — para hablar con una persona bilingüe en español.

# Annual Drinking Water Quality Report 2017





## Our Drinking Water Is Regulated

The City of The Colony is pleased to share this report with you. This report is a summary of the quality of the water we provide our customers. The analysis covers January 1 through December 31, 2017, and was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) and Texas Commission on Environmental Quality (TCEQ) 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.

## Source of Drinking Water

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 include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

## Lead and Drinking Water

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 City of The Colony Water Utilities is responsible for providing high quality drinking water, but cannot control the variety of materials used in customer plumbing components. When your water has been sitting in the home piping 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## All Drinking Water May Contain Contaminants

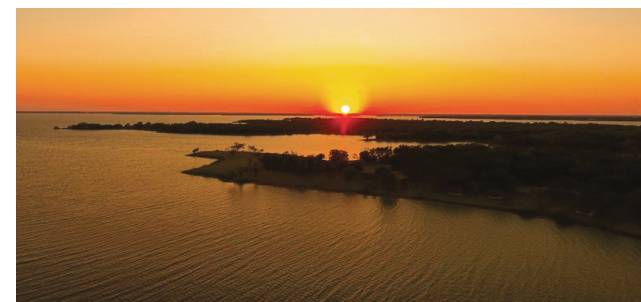
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

## Where Do We Get Our Drinking Water?

The City of The Colony owns and operates five water wells that produce up to 9 Million Gallons per Day (MGD) of treated water. Four wells are on the Trinity Sands Aquifer and one well on the Paluxy Aquifer. The Colony purchases up to 6 MGD of treated surface water from Dallas Water Utilities (DWU). DWU water is supplied from seven reservoirs: Lake Lewisville, Lake Ray Roberts, Lake Ray Hubbard, Lake Tawakoni and Lake Fork.

The City purchases up to 4 MGD of treated water from the City of Plano. This is a small area of Austin Ranch in The Colony, which lies south of State Highway 121 and east of the MKT Railroad line to the eastern city limits. Plano's water is supplied by North Texas Water Utility District (NTMWD). NTMWD water is supplied from three reservoirs: Lake Lavon, Lake Jim Chapman and Lake Texoma.

The Colony owns and operates the water system within the city limits regardless of the supplier. The water quality within the system is monitored and tested in accordance to State and Federal laws by the city's staff of state licensed water system operators.



## Water Loss

In the water loss audit submitted to the Texas Water Development Board for the time period of January – December 2017, The Colony's system lost an estimated 11.8% of the system input volume. If you have any questions about the water loss audit, please call 972-624-4431.



# 2017 Testing Results

We routinely monitor for constituents in your drinking water according to Federal and State laws. The test results table shows the results of our monitoring for the period of January 1st to December 31st, 2017. In the table you might find terms and abbreviations you are not familiar with. To help you better understand these terms we've provided the following definitions:

## DEFINITIONS

**Action Level (AL)** – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Action Level Goal (ALG)** – the level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

**Avg.** – Regulatory compliance with some MCLs is based on running annual average of monthly samples.

◀ – Symbol indicates the level found is less than the number that follows it.

**Maximum Contaminant Level (MCL)** – the highest level of a contaminant that is allowed 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 risk to health. MCLGs 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 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 expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**mrem** – millirems per year (a measure of radiation absorbed by the body).

**NA** – not applicable.

**ND** – not detected.

**NU** – not applicable Nephelometric Turbidity Units.

**Parts per billion (ppb)** – micrograms per liter (µg/l) or one ounce in 7,800 gallons of water.

**Parts per million (ppm)** – milligrams per liter (mg/l) or one ounce in 7,800 gallons of water.

**TT** – Treatment Technique is a required process intended to reduce the level of a contamination in drinking water.

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/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 (1-800-426-4791).

## Regulated Substances

Substance and unit of measure	Colony	Dallas	Plano	MCLG [MRDLG]	MCL [MRDL]	The Colony Water Utility		Dallas Water Utility		Plano Water Utility		Typical Source
	Year Sampled					Amount Detected	Range Low-High	Amount Detected	Range Low-High	Highest Level Detected	Range Low-High	
Antimony (ppb)	NA	2016	NA	6	6	NA	NA	0.09	<.200-.27	NA	NA	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Atrazine (ppb)	NA	2017	2017	3	3	NA	NA	0.15	.10-.30	0.2	.20-20	Runoff from herbicide on row crops
Barium (ppm)	2017	2017	2017	2	2	0.071	0.071	0.024	.011-.031	0.06	.059-.060	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Bata/photon emitters (pCi/L)	NA	NA	2017	0	50	NA	NA	NA	NA	6.2	6.2-6.2	Decay of natural and man-made deposits
Chromium (ppb)	2017	2017	NA	100	100	0.0026	0.0026	0.43	<1-1.30	NA	NA	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide (ppm)	2017	NA	NA	200	200	39.6	30.3-49.1	NA	NA	NA	NA	Waste from industrial chemical factories
Di(2-Ethylhexyl)phthalate (DEHP) (ppb)	2017	2016	NA	0	6	0.9	0.9	0.54	<0.5-2.7	NA	NA	Discharge from rubber and chemical factories
Fluoride (ppm)	2017	2017	2017	4	4	0.694	0.632-0.756	0.68	.598-.826	0.38	.26-.38	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha (pCi/L)	2017	NA	NA	0	15	3.3	3.3	NA	NA	NA	NA	Decay of natural or man-made deposits
Gross beta particle activity (pCi/L)	NA	2017	NA	0	50	NA	NA	5.1	4.2-6.6	NA	NA	Decay of natural or man-made deposits
Haloacetic Acids [HAA's] (ppb)	2017	NA	NA	NA	60	18.8	8.0-26.6	NA	NA	NA	NA	By-product of drinking water disinfection
Nitrate as N (ppm)	2017	NA	NA	10	10	0.2032	0.0208-.687	NA	NA	NA	NA	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Radium 228 (pCi/L)	2017	NA	2017	0	5	1.96	1.96	NA	NA	1.27	1.27-1.27	Decay of natural or man-made deposits
Total Trihalomethanes [TTHMs] (ppb)	2017	NA	NA	NA	80	19.0	8.56-35.60	NA	NA	NA	NA	By-product of drinking water disinfection
Total Organic Carbon (ppm)	Year Sampled			Treated Water Alkalinity		NA	NA	Amount Detected	Range of Levels Detected	Highest Level Detected	Range of Levels Detected	
Drinking Water (ppm) as CaCO3	NA	2017	2017	35% removal/SUVA (<2)		NA	NA	3.3	2.24-5.73	3.24	2.20-3.24	Naturally present in the environment
Source Water (ppm)	NA	NA	2017	NA		NA	NA	NA	NA	4.38	3.93-4.38	Naturally present in the environment
Removal Ratio (%) removed	NA	NA	2017	NA		NA	NA	NA	NA	47.2%	22.5-47.2	NA
Turbidity (NTU)**	Year Sampled			Turbidity Limits		Highest Single measurements	Lowest Monthly % of Samples Meeting Limits	Highest Single measurements	Lowest Monthly % of Samples Meeting Limits	Highest Single measurements	Lowest Monthly % of Samples Meeting Limits	
Turbidity (lowest monthly percent of samples meeting limit)	NA	2017	2017	0.3 (TT)		NA	NA	0.15	100%	0.74	99.3%	Soil runoff

## Secondary unregulated Substances

Substance	Year Sampled			Secondary MCL	Amount Detected	Range Low-High	Highest Level Detected	Range Low-High	Typical Source
Calcium (ppm)	2017		2017	NA	3.15	3.15	78.5	47.0-78.5	Abundant naturally occurring element
Chloride (ppm)	NA		2017	NA	NA	NA	108	14-108	Abundant naturally occurring element; used in water purification; by-product of oil field activity
Magnesium (ppm)	2017		2017	NA	0.766	0.766	11.6	4.41-11.6	Abundant naturally occurring element
Hardness, Calcium/Magnesium (ppm)	2017		2017	NA	11	11	164	159_164	Naturally occurring calcium and magnesium
pH (pH Units)	2011		2017	6.5-8.5	8.6	8.5-8.7	8.52	7.85-8.52	Measure of corrosivity of water
Sodium (ppm)	2017		2017	NA	324	324	123	46.1-123	Erosion of natural deposits; by-product of oil field activity
Sulfate (ppm)	2017		NA	NA	102.95	99.6 - 106	NA	NA	Naturally occurring; common industrial by-product; by-product of oil field activity
Total Hardness as CaCO3 (ppm)	NA		2017	NA	NA	NA	236	124-236	Naturally occurring calcium
Total Dissolved Solids (ppm)	NA		2017	NA	NA	NA	562	292-562	Total dissolved mineral constituents in water0
Total Alkalinity (As CaCO3)	2017		2017	NA	328	328	110	61-110	Naturally occurring soluble mineral salts

## Maximum Residual Disinfectant Level

### The Colony Water Utility

	Year Sampled	Average level of Quarterly Data	(Lowest result of single sample)	(Highest result of single sample)	MCLG [MRDLG]	MCL [MRDL]	Typical Source
Chlorine Residual (Chloramines) (ppm)	2017	2.78	0.7	4.8	[4]	[4]	In distribution system, Disinfectant is used to control microbes

## Tap Water Samples: Lead and Copper

### The Colony Water Utility

Lead and Copper	Year Sampled	90th Percentile	Total Number of Sites	Number Sites above Action Level	MCLG	Action Level	Typical Source
Copper (ppm)	2016	0.23	30	0	1.3	1.3	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead (ppm)	2016	0.0019	30	0	0	15	Corrosion of household plumbing systems; erosion of natural deposit

Notes: \*The MCL for Beta Particles is 4 mrem/year. The U.S. EPA considers 50 pCi/L to be the level of concern for Beta Particles.

\*\* Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of the filtration system.