

**NORTH COLLIN SPECIAL UTILITY DISTRICT
(NCSUD)**

P.O. BOX 343 2333 Sam Rayburn Hwy.

MELISSA, TEXAS 75454

PH: 972-837-2331 www.northcollinutd.com FAX 972-837-2930

Consumer Confidence Report 2019

Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Requirements

SOURCE

NCSUD purchases treated water from North Texas Municipal Water District (NTMWD) in Wylie. NTMWD obtains raw water from Lake Lavon. Through proper operation and the latest technologies, they provide us with a safe and healthy water supply. Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <http://dww2.tceq.texas.gov/DWW/>

Source Water Name: North Texas MWD CC from TX0430044 North

Type of Water: SW

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <http://dww.tceq.gov/DWW>
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 public. **Immuno-compromised persons such as those undergoing chemotherapy treatment for cancer, those who have undergone organ transplant, those 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 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 1-800-426-4791.

Information about your 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.

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.

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 by-products of industrial processes and petroleum production, and 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limits the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

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, persons 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 providers. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

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. We are responsible for providing high quality drinking water, but we 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 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 <http://www.epa.gov/safewater/le>

TCEQ completed a Source Water Susceptibility for all drinking water systems that own their sources. This report describes the susceptibility and types of constituents that may come into contact with the drinking water source based on human activities and natural conditions. The system(s) from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system contact Allen Knight @ 972-837-2331.

N	ppm	10	10	0.0578-0.721	1	2019	Nitrate [measured as Nitrogen]
Violation	Units	MCL	MCLG	Range of Individual Samples	Highest Level or Average Detected	Collection Date	Inorganic Contaminants

The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year

N	ppb	80	No goal for the total	24-37.3	32	2019	Total Trihalomethanes (TTHM)
---	-----	----	-----------------------	---------	----	------	------------------------------

The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year

N	ppb	60	No goal for the total	13.9-22.5	25	2019	Halooetic Acids (HAA5)
Violation	Units	MCL	MCLG	Range of Individual Samples	Highest Level or Average Detected	Collection Date	Disinfection By-Products

2019 Water Quality Test Results

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation
Copper	2019	1.3	1.3	0.96	0	ppm	N
Lead	2019	0	15	1.5	0	ppb	N

"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. 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.

Vulnerability of Some Populations to Contaminants in Drinking Water

ppb parts per quadrillion, or picograms per liter (pg/L)
 ppt parts per trillion, or nanograms per liter (ng/L)
 Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

NOTE: Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Haloacetic Acids (HAA5)	2019	25	13.9-22.5	No goal for the total	60	ppb		By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2019	32	24-37.3	No goal for the total	80	ppb		By-product of drinking water disinfection.
Bromate	2019	6.3	5.2 - 6.3	5	10	ppb	No	By-product of drinking water ozonation.

Regulated Contaminants

NOTE: Reported monthly tests found no fecal coliform bacteria. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coll. Maximum Contaminant Level	Total No. of Positive E. Coll or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	0.00	0	0		Naturally present in the environment.

Coliform Bacteria

NTMWD Wylie Water Treatment Plants Water Quality Data for Year 2019

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)
Chlorine	2019	1.78	0.5 - 2.7	4	4	ppm	

sampling should occur in the future. TCEQ only requires one sample annually for compliance testing.

Likely Source of Contamination	Violation	Units	MCL	MCLG	Range of Levels Detected	Highest Level Detected	Collection Date	Inorganic Contaminants
Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; and test addition.	No	ppb	6	6	0 - 0	Levels lower than detect level	2019	Antimony
Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.	No	ppb	10	0	0 - 0	Levels lower than detect level	2019	Arsenic
Discharge of drilling wastes; erosion of natural deposits.	No	ppm	2	2	0.043 - 0.044	0.044	2019	Barium
Discharge from metal refineries and coal-burning factories; from electrical, aerospace, and defense industries.	No	ppb	4	4	0 - 0	Levels lower than detect level	2019	Beryllium
Corrosion of galvanized pipes; erosion of natural deposits; from metal refineries; waste batteries and paints.	No	ppb	5	5	0 - 0	Levels lower than detect level	2019	Cadmium
Discharge from steel and pulp mills; erosion of natural deposits.	No	ppb	100	100	0 - 0	Levels lower than detect level	2019	Chromium
Erosion of natural deposits; water additive	No	ppm	4	4	0.215 - 0.230	0.230	2019	Fluoride

[Type here]

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Mercury	2019	Levels lower than detect level	0 - 0	2	2	ppb	No	Erosion of natural deposits; discharge from refineries and landfills; runoff from cropland.
Nitrate (measured as Nitrogen)	2019	0.772	0.083 - 0.772	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Selenium	2019	Levels lower than detect level	0 - 0	50	50	ppb	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Thallium	2019	Levels lower than detect level	0 - 0	0.5	2	ppb	No	Discharge from electronics, glass, and ore-processing sites; drug leaching from factors.
<p>Nitrate Advisory: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.</p>								
Radium	2018	Levels lower than detect level	0 - 0	0	5	pCi/L	No	Erosion of natural deposits.
Beta/photon emitters	2018	8.0	8.0 - 8.0	0	50	pCi/L	No	Decay of natural and man-made deposits.
Gross alpha excluding radon and uranium	2018	Levels lower than detect level	0 - 0	0	15	pCi/L	No	Erosion of natural deposits.

which promotes strong teeth; discharge from fertilizer and aluminum factors.

NTMWD Wylie Water Treatment Plants Water Quality Data for Year 2019 (Cont.)

Likely Source of Contamination	Violation	Units	MCL	MCLG	Range of Levels Detected	Highest Level Detected	Collection Date	Synthetic organic contaminants including pesticides and herbicides
Residue of banned herbicide.	No	ppb	50	50	0 - 0	Levels lower than detected level	2019	2, 4, 5 - TP (Silvex)
Runoff from herbicide used on row crops.	No	ppb	70	70	0 - 0	Levels lower than detected level	2019	2, 4 - D
Runoff from herbicide used on row crops.	No	ppb	2	0	0 - 0	Levels lower than detected level	2019	Alachlor
Runoff from herbicide used on row crops.	No	ppb	3	0	0 - 0	Levels lower than detected level	2019	Aldicarb
Runoff from herbicide used on row crops.	No	ppb	2	0	0 - 0	Levels lower than detected level	2019	Aldicarb Sulfone
Runoff from herbicide used on row crops.	No	ppb	4	3	0 - 0	Levels lower than detected level	2019	Aldicarb Sulfoxide
Runoff from herbicide used on row crops.	No	ppb	3	3	0.1 - 0.2	0.2	2019	Atrazine
Leaching from linings of water storage tanks and distribution lines.	No	ppt	200	0	0 - 0	Levels lower than detected level	2019	Benzo (a) pyrene
Leaching of soil fumigant used on rice and alfalfa.	No	ppb	40	40	0 - 0	Levels lower than detected level	2019	Carbofuran
Residue of banned termiticide.	No	ppb	2	0	0 - 0	Levels lower than detected level	2019	Chlordane
Runoff from herbicide used on rights of way.	No	ppb	200	200	0 - 0	Levels lower than detected level	2019	Dalapon
Discharge from chemical factories.	No	ppb	400	400	0 - 0	Levels lower than detected level	2019	DI (2-ethylhexyl) adipate
Discharge from rubber and chemical factories.	No	ppb	6	0	0 - 0	Levels lower than detected level	2019	DI (2-ethylhexyl) phthalate
Runoff / leaching from soil fumigant used on soybeans, cotton,	No	ppt	200	0	0 - 0	Levels lower than detected level	2019	Dibromochloropropane (DBCP)

pineapples, and orchards.	Runoff from herbicide used on soybeans and vegetables.	No	ppb	7	7	0 - 0	Levels lower than detect level	2019	Dinoseb
	Residue of banned insecticide.	No	ppb	2	2	0 - 0	Levels lower than detect level	2019	Endrin
	Discharge from petroleum refineries.	No	ppt	50	0	0 - 0	Levels lower than detect level	2019	Ethylene dibromide
	Residue of banned termitticide.	No	ppt	400	0	0 - 0	Levels lower than detect level	2019	Heptachlor
	Breakdown of heptachlor.	No	ppt	200	0	0 - 0	Levels lower than detect level	2019	Heptachlor epoxide
	Discharge from metal refineries and agricultural chemical factories.	No	ppb	1	0	0 - 0	Levels lower than detect level	2019	Hexachlorobenzene
	Discharge from chemical factories.	No	ppb	50	50	0 - 0	Levels lower than detect level	2019	Hexachlorocyclopentadiene
	Runoff / insecticide leaching from cattle, lumber, and gardens.	No	ppt	200	200	0 - 0	Levels lower than detect level	2019	Lindane
	Runoff / insecticide used on fruits, vegetables, alfalfa, and livestock.	No	ppb	40	40	0 - 0	Levels lower than detect level	2019	Methoxychlor
	Runoff / insecticide leaching from apples, potatoes, and tomatoes.	No	ppb	200	200	0 - 0	Levels lower than detect level	2019	Oxamyl [Vydate]
	Discharge from wood preserving factories.	No	ppb	1	0	0 - 0	Levels lower than detect level	2019	Pentachlorophenol
	Herbicide runoff.	No	ppb	500	4	0 - 0	Levels lower than detect level	2019	Picloram
	Herbicide runoff.	No	ppb	4	4	0.32 - 0.33	0.33	2019	Simazine
	Runoff / insecticide leaching from insecticide used on	No	ppb	3	0	0 - 0	Levels lower than detect level	2019	Toxaphene

Volatle Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violatio n	Likely Source of Contaminatio n
Dichloromethane	2019	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from pharmaceutical
Chlorobenzene	2019	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from chemical and agricultural factors.

NTMWD Wylie Water Treatment Plants Water Quality Data for Year 2019 (Cont.)

Volatle Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violatio n	Likely Source of Contaminatio n
1, 1, 1 - Trichloroethane	2019	Levels lower than detect level	0 - 0	200	200	ppb	No	Discharge from metal degreasing sites and other factors.
1, 1, 2 - Trichloroethane	2019	Levels lower than detect level	0 - 0	3	5	ppb	No	Discharge from industrial chemical factors.
1, 1 - Dichloroethylene	2019	Levels lower than detect level	0 - 0	7	7	ppb	No	Discharge from industrial chemical factors.
1, 2, 4 - Trichlorobenzene	2019	Levels lower than detect level	0 - 0	70	70	ppb	No	Discharge from textile-finishing factors.
1, 2 - Dichloroethane	2019	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from industrial chemical factors.
1, 2 - Dichloropropane	2019	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from industrial chemical factors.
Benzene	2019	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from factors; gas storage tanks and landfills.
Carbon Tetrachloride	2019	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from chemical plants and other industrial activities.

cotton and cattle.

Highest single measurement		1 NTU		0.97		No		Soil runoff.	
Likely Source of Contamination		Limit (Treatment Technique)		Level Detected		Violation		No	

Turbidity

al and chemical factors.									
Discharge from petroleum refineries.	No	ppb	700	0	0 - 0	Levels lower than detect level	2019	Ethylbenzene	
Discharge from rubber and plastic factors; leaching from landfills.	No	ppb	100	100	0 - 0	Levels lower than detect level	2019	Styrene	
Discharge from factors and dry cleaners.	No	ppb	5	0	0 - 0	Levels lower than detect level	2019	Tetrachloroethylene	
Discharge from petroleum factors.	No	ppm	1	1	0 - 0	Levels lower than detect level	2019	Toluene	
Discharge from metal degreasing sites and other factors.	No	ppb	5	0	0 - 0	Levels lower than detect level	2019	Trichloroethylene	
Leaching from PVC piping; discharge from plastics factors.	No	ppb	2	0	0 - 0	Levels lower than detect level	2019	Vinyl Chloride	
Discharge from petroleum factors.	No	ppm	10	10	0 - 0	Levels lower than detect level	2019	Xylenes	
Discharge from industrial chemical factors.	No	ppb	70	70	0 - 0	Levels lower than detect level	2019	cis - 1, 2 - Dichloroethylene	
Discharge from industrial chemical factors.	No	ppb	600	600	0 - 0	Levels lower than detect level	2019	o - Dichlorobenzene	
Discharge from industrial chemical factors.	No	ppb	75	75	0 - 0	Levels lower than detect level	2019	p - Dichlorobenzene	
Discharge from industrial chemical factors.	No	ppb	100	100	0 - 0	Levels lower than detect level	2019	trans - 1, 2 - Dichloroethylene	

Lead and Copper	Date Sampled	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
-----------------	--------------	-------------------	-----------------	-----------------	-------	-----------	--------------------------------

Lead and Copper

**NTMWD Wylie Water Treatment Plants
Water Quality Data for Year 2019 (Cont.)**

Giardia	2019	0	0 - 0	(Oo) Cysts/L	Human and animal fecal waste.
Cryptosporidium	2019	0	0 - 0	(Oo) Cysts/L	Human and animal fecal waste.
Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination

Cryptosporidium and Giardia

NOTE: Total organic carbon (TOC) has no health effects. The disinfectant can combine with TOC to form disinfection by-products. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. By-products of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report. * Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed.

Removal Ratio	2019	63.3	19.3 - 63.3	% removal *	N/A
Drinking Water	2019	3.60	1.55 - 3.60	ppm	Naturally present in the environment.
Source Water	2019	5.08	3.89 - 5.08	ppm	Naturally present in the environment.
	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination

Total Organic Carbon

NOTE: Water providers are required to maintain a minimum chlorine disinfection residual level of 0.5 parts per million (ppm) for systems disinfecting with chloramines and an annual average chlorine disinfection residual level of between 0.5 (ppm) and 4 parts per million (ppm).

Disinfectant Type	Year	Average Level of Quarterly Data	Lowest Result of Single Sample	Highest Result of Single Sample	MRDL L	MRDL G	Units	Source of Chemical
Chlorine Residual (Chloramines)	2019	1.78	0.05	2.70	4.00	< 4.0	ppm	Disinfectant used to control microbes.
Chlorine Dioxide	2019	0	0	0	0.80	0.80	ppm	Disinfectant.
Chlorite	2019	0.04	0.00	0.42	1.00	N/A	ppm	Disinfectant.

Maximum Residual Disinfectant Level

NOTE: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.

Lowest monthly percentage (%) meeting limit	0.3 NTU	95.50%	No	Soil runoff.
---	---------	--------	----	--------------

Calcium	2019	60.7	60.6 - 60.7	ppm	Abundant naturally occurring element.
Aluminum	2019	Levels lower than detect level	0 - 0	ppm	Erosion of natural deposits.
Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination

Secondary and Other Constituents Not Regulated

NOTE: Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection by-products. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Dibromochloromethane	2019	8.94	4.11-8.94	ppb	By-product of drinking water disinfection.
Bromodichloromethane	2019	11	6.83-11.0	ppb	By-product of drinking water disinfection.
Bromoform	2019	2.64	<1.0-2.64	ppb	By-product of drinking water disinfection.
Chloroform	2019	13.6	6.16-13.6	ppb	By-product of drinking water disinfection.
Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination

Unregulated Contaminants

ADDITIONAL HEALTH INFORMATION FOR LEAD: 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. [Customer] 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 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 <http://www.epa.gov/safewater/lead>.

Copper	2019	1.3	0.96	ppm	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	2019	15	1.5	ppb	Corrosion of household plumbing systems; erosion of natural deposits.

Abundant naturally occurring element; used in water purification; by-product of oil field activity.	ppm	11.6 - 65.3	65.3	2019	Chloride
Erosion of natural deposits; iron or steel water delivery equipment or facilities.	ppm	0 - 0	Levels lower than detect level	2019	Iron
Abundant naturally occurring element.	ppm	4.39 - 4.47	4.47	2019	Magnesium
Abundant naturally occurring element.	ppm	0.0046 - 0.0048	0.0048	2019	Manganese
Erosion of natural deposits.	ppm	0.0049 - 0.0051	0.0051	2019	Nickel
Measure of corrosivity of water.	units	7.94 - 8.65	8.65	2019	pH
Erosion of natural deposits.	ppm	0 - 0	Levels lower than detect level	2019	Silver
Erosion of natural deposits; by-product of oil field activity.	ppm	39.8 - 40.0	40.0	2019	Sodium
Naturally occurring; common industrial by-product; by-product of oil field activity.	ppm	34.8 - 132	132	2019	Sulfate
Naturally occurring mineral salts.	ppm	81 - 119	119	2019	Total Alkalinity as CaCO3
Total dissolved mineral constituents in water.	ppm	250 - 534	534	2019	Total Dissolved Solids
Naturally occurring calcium.	ppm	114 - 191	191	2019	Total Hardness as CaCO3
Moderately abundant naturally occurring element used in the metal industry.	ppm	0 - 0	Levels lower than detect level	2019	Zinc